

**Language Learning Strategies  
And Advanced Language Learners**

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## **ABSTRACT**

Over the past twenty five years, language learning strategy research has attracted increasing attention. Language learning strategies are one factor that affects second language acquisition. However, unlike other factors, language learning strategies can be manipulated to an extent that most other factors cannot. Moreover, these strategies might be a relatively powerful factor that affects second language acquisition. Nearly all of the language learning strategy research to date has been conducted with the intention of helping less successful language learners. However, more successful language learners, including advanced language learners, stand to benefit greatly from language learning strategy research, as well. The purpose of this essay is to examine the research done on language learning strategies and language learning strategy instruction, especially as it pertains to advanced adult learners of a second or foreign language. This paper supports an alternative paradigm of and approach to language learning strategy instruction/development for advanced language learners.

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## INTRODUCTION

There is a sort of irony to the educational efforts of teachers around the world. As Norman points out, “we expect students to learn yet seldom teach them about learning” (Norman, 1980, p. 97). That is, we as teachers tend to hand information to students and simply assume that they have the cognitive skills and tools in place to effectively store and use that information. This pedagogical methodology began to come under scrutiny as developments took place in education in recent decades. Learners were no longer seen as passive receptacles of information but as active participants in the learning process. Along with the rise of learner autonomy and the conception of the empowered learner came an interest in the learning strategies students employ in the pursuit of education (Wenden, 1991). Moreover, in the 1970s, education researchers began to formally investigate the qualities that define “the good language learner,” especially the use and selection of language learning strategies (LLS)\* (e.g., Rubin, 1975; Naiman, Frohlich, Stern, & Todesco, 1978).

It is the purpose of this essay to examine the research done on LLS and LLS instruction, especially as it pertains to advanced adult learners of a second or foreign language.\*\* Precious little empirical research on LLS has been conducted for the benefit of these students, despite the attention that LLS research has received in the past two decades. The LLS research that has been done with advanced learners usually involves fairly informal inquiries into what constitutes “the good language learner” or interviews/questionnaires about these learners’ perception of their selection and use of LLS, which are presumed to be better than the LLS of lower level students and therefore are a deciding factor in the success of these learners.

Possibly the most important reason for the lack of research for the sake of advanced learners is the overriding goal of most LLS research. In the words of Rees-Miller (1993, p. 679), “substantial research in the field of second language acquisition has been devoted to discovering what good language learners do and how their learning strategies can be taught to less successful learners to improve their learning efficiency.” LLS research is not so much concerned with helping the advanced learner as it is with learning from the successful and/or advanced learner and using what is learned to help less successful learners. For the sake of advanced language learners, researchers may choose to emphasize another goal of LLS research, the development of effective autonomous learning.

It is important to learn more about LLS with the intent of helping the advanced learner, because the effective use of LLS may be the way for these learners to continue to increase their knowledge of and proficiency in their second language (L2). There are a multitude of factors that affect the learning of an L2—cognitive style, gender, environment, and many others—but few of these factors can be changed or manipulated to the degree that LLS can. LLS appear to be the most significant factor over which the language learner has control. By improved manipulation of LLS, advanced language learners may hope to continue learning and greatly improve their command of the second language.

\*“LLS” will stand for “language learning strategy” or “language learning strategies,” depending on the context.

**\*\*From here on, “advanced adult learners of a second or foreign language” may be referred to as “advanced learners,” unless otherwise specified.**

## II. METHODOLOGY

In this project, there are essentially two methodologies: a literature search methodology (data gathering) and a composition methodology (data organizing and processing). Concerning the literature search, six types of searches were conducted: electronic database searches, generation searches, hand searches, shelf searches, on-line searches, and contact searches. The electronic database searches for subject, titles, and major or relevant authors were conducted on MLA Bibliography, PsychInfo, ERIC, LLBA, and Dissertation Abstracts Online, and Stanford University's Socrates database. Multiple generation searches off the reference lists of comprehensive, frequently cited, highly relevant, or recent articles/books led to works that are related to this project. After finding an article in a journal, a hand search of that journal was conducted; several additional relevant pieces were found this way. When a book or journal series that was related to this project was found, a cursory shelf search of the neighboring items on the shelf was conducted. This led to the discovery of some material that might not otherwise have been found. On-line searches using the World Wide Web did not produce information that was used in this project. Finally, contact searches were conducted by email with Richard Donato and Dawn McCormick at the University of Pittsburgh, who wrote an article that figures prominently in chapter eight, inquiring about any research they may have done with LLS and advanced learners. Donato, who contacted me on behalf of both of them, was generous in providing useful information.

By far the most used searches were the electronic and generation searches. However, the literature search could not have been successfully completed without an

effective combination of search techniques. Furthermore, one type of search often led to another. For instance, an electronic search might lead to a book, which might lead to finding another useful book by doing a shelf search, which might lead to a generation search through that book's reference list, which might lead back to a new electronic search.

The primary advantage of this methodology was that it helped to ensure (as far as is reasonably possible) that the articles and publications that were of most relevance to this project were located. The primary disadvantage was that it demanded an extensive amount of time and effort. An alternative methodology would have been to rely heavily on information from a contact search. For instance, a prominent figure in LLS studies could have been contacted for a relevant reading list. If this researcher provided what he or she believed to be a truly exhaustive list of reading material, this method would have saved many hours of searching. However, such a list would likely reflect the biases of that researcher and might not include studies that run counter to his or her beliefs about LLS.

The other methodology in this project involved the assembling of a coherent critical review of literature. Once an article, thesis, or book was found, the abstracts, introductions, conclusions, and sometimes other segments of the piece were checked to determine whether it was relevant to this project. The pages were coded using a lettering system that corresponded with the chapters or sections that I planned to have in the essay. For instance, any page of any of the articles or books that dealt with LLS instruction was assigned the letter F and subcodes related to the various issues addressed in the LLS instruction chapter, such as "F d/e" for "F direct vs. embedded



instruction” All the letter codes that had been written on the pages were then written in list form on the front page of articles or on sticknotes on the cover of books. If the piece were coded as having C, D, and G information in it, it was placed in the C stack (which would be dealt with earlier in the essay than the others) and would be put into the D stack after work on the C section was completed. This methodology proved most useful in keeping a voluminous amount of material in order and easy accessible.

### III. DEFINITIONS AND CATEGORIES OF LLS

One of the great difficulties facing LLS researchers is the lack of consensus on the definition and categorization of LLS. There are hundreds of LLS and it is understandable that attempts to define or organize them will produce varied results. Nevertheless, as Oxford (1993) points out, the results of investigations are difficult to compare when there is lack of agreement in the description of LLS.

This chapter has two purposes: 1) to provide an overview of LLS definitions and category system, and 2) to create the most comprehensive definition of LLS to date. Creating a single categorization system for LLS is not a goal of the present project. Attempts to reduce the number of category systems would no doubt be advantageous to LLS research in certain ways, but reducing them to a single category would be counter-productive; depending on the intent of the research, it serves us well to maintain several—though preferably a limited number—of LLS category systems.

Table 3.1 serves as a compilation of LLS definitions (and changes in definitions over time) in chronological order. Though a number of definitions of LLS are presented, it is not an exhaustive list. Also, this list deals only with language learning strategies, as opposed to communicative (or language use) strategies or general learning strategies. Furthermore, it does not attempt to include the broader heading of language learner strategies, which may include managing, learning, and use strategies (Cohen, 1996; Ellis, 1985; Wenden & Rubin, 1987). Finally, it should be noted that some authors suggest that distinctions can be made between strategies, substrategies, techniques, tactics, and moves, though such distinctions will not be

addressed in this essay. Considering the nebulous nature of a definition of LLS, it is remarkable that in the majority of published articles on the subject, “language learning strategies” are not explicitly defined.

In order to create a more comprehensive definition of LLS, we must consider the features of LLS in greater detail. The following list of features is provided by Oxford (1990):

1. LLS contribute to the main goal [of language learning], communicative competence.
2. LLS allow learners to become more self-directed.
3. LLS expand the role of teachers.
4. LLS are problem-oriented.
5. LLS are specific actions taken by the learner.
6. LLS involve many aspects of the learner, not just the cognitive.
7. LLS support learning both directly and indirectly
8. LLS are not always observable
9. LLS are often conscious.
10. LLS can be taught.
11. LLS are flexible.
12. LLS are influenced by a variety of factors.

This is a helpful list, though I suggest some modifications and additions. One criticism might be leveled against the claim that LLS are flexible, depending on what Oxford means by this. Dansereau (1985) states that a strategy can be either algorithmic (i.e., having a sequence of [sub]processes that remain fixed over tasks) or it may be heuristic (i.e., having a sequence of [sub]processes that may be modified/flexible, depending on task conditions and the needs and skills of the learner). Oxford might be in opposition to Dansereau’s opinion, unless she means that LLS are flexible in the sense that there are no such thing as optimally appropriate strategy-task pairs that are pre-determined and fixed.

The idea that LLS are often conscious has also fallen under criticism. Though Bialystok and others have claimed that LLS need not be conscious processes, but can be unconscious processes (Bialystok, 1985), Cohen asserts that one of the defining characteristics of strategies is that they are consciously chosen (Cohen, 1998). Though the element of conscious choice does seem to be in keeping with a strict definition of “strategy,” for the purposes of LLS research, it is preferable to allow certain unconscious processes, such as strategies that have over time become habitualized by the user, to fall under the definition of “language learning strategy.”

In terms of additions, the following are other features that can be added to the above list:

- LLS are typically selected by the learner.
- The use of LLS can be planned.
- LLS are optional, though their use often decides success or failure.
- LLS can be helpful or deleterious, depending on how they are selected and used.
- LLS can be more or less flexible, i.e., adaptable to the nature of the task (Abraham & Vann, 1987).
- Learning strategies may differ with respect to the scope of the task they are designed to accomplish (Dansereau, 1985).
- Learning strategies may differ in the degree to which they are specialized for particular tasks (Dansereau, 1985).
- LLS are most effectively selected and used when done so in the process of goal-fulfillment (Donato & McCormick, 1994).

One of the features of LLS that most confounds attempts to define them is their scope. As mentioned earlier, LLS may be viewed as including “techniques” or the more specific operations of strategic action. Similarly, LLS can be viewed on a grand scale, such as the LLS of “learning by doing.” Here, an LLS represents an entire approach to language learning, as found in Communicative Language Teaching (CLT).

To help narrow the scope of the definition of LLS, one might want to make a distinction between “learning strategies” and “study skills.” Nisbet & Shucksmith (1986) suggest that learning strategies tend to be unobservable mental processes, while study skills are more overt techniques (such as organized note-taking). Ellis & Sinclair (1989) put forth the view that learning strategies are process oriented and study skills are product oriented. For the sake of this paper, I will not distinguish between the two. There are good reasons to make a distinction, but the reality is that the lines between “learning strategies” and “study skills” blur to such a degree at times that it is not useful to separate them, given the aim of this paper to define LLS in comprehensive terms.

Having considered the various features of LLS, I offer what hopes to be a more useful definition of LLS: language learning strategies are specific actions or mental procedures that assist in fulfilling language learning goals.

Concerning the categorization of LLS, there are almost two dozen L2 strategy classification systems. Oxford (1993, p. 182) suggests that they can be sorted into the following five groupings:

1. Systems related to successful language learners such as the typologies...by Naiman, et al. (1975), Rubin (1975), and Stern (1975; 1983);
2. Systems based on psychological functions such as cognitive, metacognitive, and affective (e.g., taxonomies by Carver, 1984; Marton, 1983; O'Malley & Chamot, 1990; Seliger 1982);
3. Linguistically-based strategy systems dealing with inferencing, language monitoring, formal practicing, and functional practicing (Bialystok, 1978, 1981), or with various types of communication strategies like paraphrasing or borrowing (Tarone, 1977, 1983);
4. Systems based largely on particular language skills such as oral production, vocabulary learning, reading comprehension, or writing (Cohen, 1990);
5. Systems based on different types of learners such as the style-based system of Sutter (1989) or the strategy-style linkages made by Ehrman and Oxford (1989, 1990) and Ely (1989).

Other groupings are possible, such as systems that divide strategies by cognitive processes and psychomotor activities (Prokop, Fearson, & Rochet, 1982), by algorithmic vs. heuristic categories (Dansereau, 1985), and by primary vs. support categories (Dansereau, 1985). The systems that seem to have gained the most attention are those by O'Malley & Chamot and Oxford.

O'Malley, Chamot, and others use a category system based on Brown and Palinesar's (1982) scheme of metacognitive and cognitive strategies, but have added a third classification to account for social mediation strategies. Metacognitive strategies involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned. Metacognitive strategies include planning, directed attention, selective attention, self-management, self-monitoring, and others. Cognitive strategies involve interacting with the material to be learned, manipulating the material mentally or physically, or applying a specific technique to a learning task. Cognitive strategies include repetition, resourcing, grouping, note-taking, deduction/induction, substitution,

elaboration, and others. Social mediation strategies (or social and affective strategies) involve interacting with another person to assist learning or involve using effective control to assist a learning task. Social mediation strategies include asking for clarification, cooperation, and others (O'Malley, Chamot, Stewner-Manzanares, Kupper, & Russo, 1985a; Chamot & Kupper, 1989). For a sample of these LLS and their descriptions, see Table 3.2.

Gu (1996) notes that it is not always easy for these researchers to sort LLS neatly into their categorization schemes. He observed that for the LLS “questioning for clarification,” O'Malley et al. (1985a) had classified it under cognitive strategies, but later O'Malley and Chamot (1990) classified it under social/affective strategies. Interestingly enough, I found that even in the same year, O'Malley et al. (1985b) in a separate article had classified “questioning for clarification” under socioaffective strategies. This sort of problem applies to other categorization schemes, as well.

Oxford has divided LLS into six categories: memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, social strategies, and affective strategies. Memory strategies assist in entering information into long-term memory and in retrieving information when needed for communication. Cognitive strategies are used for forming and revising internal mental models and receiving and producing messages in the target language. Compensation strategies, such as guessing unknown meanings while listening or reading, or using circumlocution in speaking and writing, are used to overcome deficiencies in knowledge of the language. Metacognitive strategies allow the learner to exercise “executive control” over planning, arranging, focusing, and evaluating their own learning process.

Affective strategies help learners to control feelings, motivations, and attitudes related to language learning. Social strategies help facilitate interactions with others, often in discourse situations (Oxford, 1990).

It is not necessary for the purposes of this essay to select one category system over another. The discussion on categories is important, however, for arriving at an overall understanding of LLS.

Definitions and categorizations of LLS may appear to be somewhat inconsequential issues at first glance, but they are of the utmost importance to LLS research. They represent a troubling paradox. On one hand, “learning strategies in order to be teachable and their results replicable must be defined in terms of specific behaviors” (Rees-Miller, 1993). For LLS research as it has been conducted so far, this is a truism. Identification of individual LLS seems necessary for LLS instruction. On the other hand, “labels or taxonomies [of LLS] can never fully capture how categories of strategic action (e.g., a functional practice strategy) can be refined and expanded upon by the learner over time and task” (Donato & McCormick, 1994). That is, the very act of labeling and categorizing LLS (something that seems necessary for LLS research and instruction as they have been conducted so far) necessarily has us viewing LLS in a way that does not do them justice. This paradox is not insurmountable. As we will see in Chapter Seven, by changing the direction of LLS research and envisioning a new LLS instruction/development paradigm, this problem can be overcome.



#### IV. RESEARCH INSTRUMENTS OF LLS

Having defined LLS and having looked at the major category systems, we have a sense of the essential nature of LLS. In this chapter, we will look at seven methods by which LLS are discovered and studied. Each method will be looked at in terms of the advantages of the method and the disadvantages or validity problems of that method. Afterwards, we will turn our attention to the methods by which the use and selection of LLS are measured against learning results.

The fact that LLS are not always observable was mentioned in the previous chapter. All LLS begin as mental processes and some, like the so-called metacognitive strategies, rarely if ever become visible to the observer. This leaves the LLS researcher with the burning question of how to discover LLS, observe LLS, and assess LLS use. To date, all the methods that are in use have considerable criticisms leveled against them. LLS investigation methodology is truly one of the weak areas in LLS research, if not the weakest area of all.

Before we look at the major methods of LLS investigation, it would serve us well to consider the questions that LLS researchers should seek to answer. The following is a list of what I consider the more salient questions in LLS investigative research:

- How can LLS be investigated in a valid and reliable way? How can validity and reliability of the research methods be proved?
- What is the LLS classification scheme that should be used, given the purpose of any research project?

- Is it possible or desirable to make qualitative distinctions between LLS? (Carver, 1984)
- Can this project improve our understanding of LLS? How will this project improve our understanding of LLS?

### **Questionnaires**

First, let us look at the questionnaire method, then the interview method. The questionnaire and oral interview are similar in an important respect: they rely on the subject to honestly answer a set of questions. That is, the data taken from a questionnaire or interview is not what the researcher observes to be true, but what the subject knows or believes to be true. Interviews can be seen as more flexible questionnaires and usually necessitate person-to-person contact; for the purposes of this essay, the two will be considered as the same sort of method, even though different data can end up being collected depending on whether a researcher conducts an interview or uses a questionnaire, due to a halo effect or some other cause (Kratwohl, 1998).

The questionnaire or survey has for years been the primary method of LLS investigative research (Gu, 1995). Over a dozen questionnaires have appeared in published studies. Table 4.1 lists some of the major questionnaires that have been used to date. It is composed from information found in Oxford's (1996) article entitled "Employing a Questionnaire to Assess the Use of Language Learning Strategies." By far the most commonly used questionnaire is Oxford's SILL. As of

late 1995, the SILL had been used in 40-50 studies, including a dozen dissertations and theses involving approximately 10,000 language learners (Oxford, 1996).

There are several **advantages to using a questionnaire**:

1. The data that is collected is quantitative and lends itself to statistical analysis (Cohen, 1998).
2. Questionnaires give the researcher greater control over the data collection (Cohen, 1998).
3. A questionnaire can be done with many subjects at once or within a relatively short amount of time (Cohen, 1998).
4. Questionnaires can avoid some of the pitfalls of interviews, such as the absence of effects caused by the very presence of a human interviewer (Kratwohl, 1998).
5. Questions asked in written forms may help avoid the taboos of oral discourse, e.g., the face-to-face discussion of sensitive issues (Akinaso, 1996).
6. The data collection can be designed to be fairly easy for use by researchers and teachers alike.
7. Questionnaires may be completed at the subject's leisure, allowing the subject to select the time to complete the questionnaire.
8. Questionnaires can be designed such that they can be completed fairly quickly by a subject.

The following are some of the **disadvantages or validity problems with LLS questionnaires**:

1. Questionnaires rely on the honesty of the subject. Even when subjects are being as truthful as possible, they may not be aware of the LLS that they actually use,

the frequency of use of any given LLS, the significance of that LLS, etc.; consequently, they may give false information (Cohen, 1990).

2. Questionnaires only elicit what learners think or perceive retrospectively and out of context about their LLS. Given the notorious inaccuracy of the information stored in long-term memory, this is a serious reliability issue.
3. LLS questionnaires and other elicitation instruments have so far not been able to uncover flexibility and appropriateness of LLS use (Gu, 1995). The latter is especially important for meaningful future research in LLS.
4. LLS questionnaires have so far investigated what LLS are selected and used, not how LLS are selected and used (Vann & Abraham, 1990). Without knowing how LLS are selected and used, the findings of LLS studies cannot effectively be applied in instruction. This is a matter that can and should be rectified.
5. No LLS study has attempted to directly assess adult learners' motivations for using particular LLS in authentic language settings (Brown, 1996). Again, this is matter than can and should be rectified.
6. As with other forms of reports by learners about their LLS selection and use, declarative knowledge is used to investigate procedural knowledge (Gu, 1996). It is not clear to me how distinct these two are, but certain theorists might hold that these are wholly separate systems of knowledge (cf. Krashen's distinction between "learning" and "acquisition" in the next chapter). A learner might not be able to speak exhaustively or thoroughly about his or her procedural knowledge. This recalls respected theories from the field of epistemology, such as Polanyi's

(1962) idea that we do not have exhaustive declarative access to our skill knowledge.

7. In an important study by Politzer and McGroarty (1985), self-reported LLS use was compared against actual performance measures. They found that there were no overall relationship between the group of LLS in their questionnaire and the gains of the product measures. The Hispanic students in the study, who used what were viewed as “good” LLS, did not perform as well on communicative competence and grammar tests as Asians, who did use the supposed “good” LLS.
8. The responses to questionnaires may be too simplistic to accurately measure LLS use (e.g., questionnaires containing yes/no questions) (Cohen, 1998).
9. Questionnaires that have not been carefully designed and piloted may have ambiguities in wording that may affect how subjects answer (Cohen, 1998).
10. The questionnaire designer’s choice of words or method of expression (e.g., by giving examples) may induce the subject to answer a certain way (Cohen, 1998).
11. LLS questionnaire are only sometimes designed specifically for a certain sample field of language learners. Often, an established, general questionnaire will be used by a researcher for convenience or for the sake of replication, even though that questionnaire might not be suitable for that particular group of subjects. For instance, the SILL has been used around the world, but it is questionable whether it is suitable for all cultures (Cohen, 1998).
12. Most of the information elicited from subjects is generalized information about their LLS. When learners move away from specific instances of LLS use, they may tend to give less accurate information about their LLS (Cohen, 1990). On a

related point, having acknowledged that LLS are task-specific in nature, it is no longer interesting or useful to try to learn about the “general use” of an LLS. Furthermore, even if we could speak of the general use of an LLS by a language learner, we would still be faced with the fact that individual learners use LLS successfully in different ways, so the information would still not be useful for pedagogical implementation purposes.

13. LLS questionnaires are often done in language classes or with willing (i.e., possibly highly motivated) language learners. No random sampling has been done so far in LLS research.
14. Unless questionnaires are done in classrooms, it may be difficult to induce subjects to complete questionnaires on their own. Whereas participating as a subject in an observation may not necessarily involve extra work on the part of the subject, a questionnaire demands at least some time and effort from the subject.

Because the SILL is the most commonly used LLS questionnaire, it is worthwhile to consider the criticisms that have raised against it. As observed by Cohen (1998), two reports have been critical of the SILL, one by LoCastro (1994) and the other by Gu, Wen, & Wu (1995). LoCastro (1994, p. 412) had the following to say about the SILL:

Class discussion of the SILL suggests that participants generally found the SILL inappropriate in that there are no strategies specifically addressing listening as a means to learn. My observations and interviews reveal that listening is often cited as a problem and many motivated learners engage in English listening practice on their

own. In addition, respondents criticized the lack of contextualization of some items, such as Item 14: “I start conversations in English” (only two reported using it).

Overwhelmingly, they suggested it depends on the situation and the people.

The subjects criticize the absence of what they perceive to be an important LLS from the SILL. They also criticize the lack of contextualization or ambiguity of some items on the SILL. LoCastro goes on to question the use of generalized research instruments in settings that are not appropriate (see disadvantage/validity problem #7 above) and question Oxford’s categorization of LLS (specifically the separation of memorization strategies from cognitive strategies), charging that the SILL may be predisposing the researcher to arrive at certain conclusions not supported by even anecdotal evidence of teachers (LoCastro, 1994).

In an ingenious study by Gu, Wen, & Wu (1995), twenty questions were taken or adapted from the SILL and were used in four survey sessions with 95 sophomore science students who were learning EFL at the Beijing University of Industry. The intention of these researchers was to demonstrate that ambiguity of reference can corrupt the elicited findings from Likert-scale questionnaires. Questionnaire 1 directly took Oxford’s scale without specifying dimensions of reference; Questionnaire 2 asked the subjects to choose their answers by comparing themselves with their peers; Questionnaire 3 asked them to select their present behavioral frequency as compared with their own past learning experiences in secondary schools; and Questionnaire 4 asked them to answer about an LLS/language learning behavior by comparing its frequency of occurrence with that of other language skills. The researchers found that the results of 13 of the 20 items differed across

questionnaires. Despite some validity issues with this study (such as the distribution of Questionnaire 1 followed one week later by the simultaneous distribution of Questionnaires 2, 3, and 4 during the same class period), it remains an insightful indictment against the use of the SILL *sans* a dimension of reference.

In addition to the LoCastro study and the Gu, Wen, and Wu study, other criticisms can be raised against the SILL. It measures type, amount, and frequency of LLS. Oxford herself acknowledges that there are hundreds of LLS (Oxford, 1993), yet only some of them are represented on the two versions of the SILL. This would not likely be as much of a problem if it could be guaranteed that the most important ones were chosen, but as demonstrated in the LoCastro study, it seems that for certain groups of language learners, important LLS (e.g., listening LLS) are missing from the SILL.

My primary criticism of the SILL, however, is with the amount and frequency measures. Frequency and amount are standard assessment measures, but they may not be particularly useful in LLS assessment studies. Having collected data on amount and frequency of LLS used by subjects, can we really correlate frequency and amount information meaningfully with learner outcomes or learner success? From what we have learned about LLS, it seems that the answer is no. As we will see in the following chapter, amount and frequency of LLS use do not necessarily distinguish a more successful language learner from a less successful one. It seems to be appropriateness of LLS use that distinguishes them. For instance, a certain LLS might be quite important for a successful language learner, but used only briefly and only in certain situations. This LLS, if it is even represented on the SILL, would be



given a low mark despite its important and appropriate use. Cohen (1998), lamenting the emphasis on frequency over successful use in the SILL, suggests that the repeated use of an LLS may simply be a sign that the learner is continuing to use a given LLS unsuccessfully. The SILL does not have a direct measure of how successfully the learners used the LLS, only an indirect measure correlating an increase in frequency of use of an LLS and an increase in task performance. Furthermore, Oxford's interpretation of the frequency of LLS use may not apply across all groups of learners. According to LoCastro (1994), Oxford says that the least frequently used LLS involve managing the language, specifically LLS that involve memory; however, LoCastro found that the main LLS of advanced Japanese is memorization. It would only be fair to mention that the same criticism could be leveled against measures other than frequency in LLS questionnaires.

### **Interviews**

Interviews may happen quite frequently in LLS research, but they do not show up as often as questionnaires do in the published literature. One of the possible reasons for this that interviews might be conducted only as a preliminary stage to determine the format and content of a questionnaire, the results of which are the true focus of a research project. Interviews found in LLS literature tend to be interviews with "good" language learners to determine what makes them successful, which includes the use of their LLS (e.g., Naiman, Frohlich, Stern, & Todesco, 1978).

Many of the advantages and disadvantages/validity problems of questionnaires apply to interviews, as well. **Differences in terms of advantages** include the following:

1. Interviews are more flexible than questionnaires, and can allow the researcher to spontaneously ask useful questions as the (unanticipated) need arises (Cohen, 1998).
2. Interviews can be used to determine the format and contents of a questionnaire if further quantitative research is needed (Cohen, 1998)
3. The researcher holding one-on-one interviews can develop case studies of learners that are more robust than the information gleaned from a questionnaire (Cohen, 1998). Since LLS are believed to be task-specific and learner-specific, interviews may prove to be more useful in LLS research than questionnaires.
4. Group interviews with successful language learners could elicit not only commonalities (which a questionnaire could also elicit), but “war stories” about common trials and tribulations in language learning and how these difficulties were successfully overcome through LLS use (Fetterman, 1998).
5. The duration of interviews is flexible, allowing for time constraints and further probing.
6. Interviews allow the subjects to more freely comment about their LLS than questionnaires allow. This can lead to interesting, unanticipated elicitations from the subjects.

There are also **differences in the disadvantages/validity problems:**

1. Interviews provide data that is generally more qualitative than data from questionnaires, and therefore they lend themselves less to statistical analysis than questionnaires do.
2. The presence of the interviewer may skew the results of the survey. That is, the interviewee may respond to please the interviewer, give a false answer in order to save face, or be effected in other ways (Krathwohl, 1998).
3. It might be more difficult for subjects to do an interview than complete a questionnaire because of scheduling difficulties or time constraints.
4. A researcher often cannot do as many interviews as he/she can distribute and receive questionnaires.

Questionnaires and interviews, despite their flaws, remain the most popular method for investigating LLS. Coleman, in his article “Developing a questionnaire to interview the advanced language learner” (1995), bemoans the difficulties of designing a valid and reliable instrument to investigate advanced language learners, difficulties concerning word choice, selection of appropriate questions, etc. In the piloting stage, various sections of the questionnaire failed. So not only are there innate disadvantages and problems with even the best of questionnaires and interviews, there are design difficulties, as well.

### **Observations**

Observations are unlike questionnaires/interviews in several ways, most importantly because observations try to directly discover and assess LLS, while questionnaires/interviews ask the subjects to try to describe and comment on their

LLS. For those LLS that are considered “observable,” it is advantageous to use observation as a method of investigation because it circumvents the problem of acquiring data (which is often questionable) from the information middleman, the subject; the data collected can be more objective. As was mentioned earlier, however, LLS are not always observable. In fact, one could say that LLS are not observable at all in that they are primarily cognitive processes; what are observable are only some of the by-products of LLS (recall the discussion in Chapter Three between “learning strategies” and “study skills”). Direct observation by itself is therefore rarely used in LLS research. LLS researchers who have done observations, such as Naiman et al. (1978) and Fanselow (1979), experienced frustration with this method (Cohen 1998). When it is used, it typically serves to corroborate other instruments that are used (Wesche, 1977, Naiman et al., 1978, and Gliksman, Smythe, & Gardner, 1982). For instance, videotapes of a class can be observed to support or debunk the claims made by subjects about their own LLS (Jones, 1982; Tetroe and Jones, 1982 as cited in Cohen, 1984). Though there are a number of other advantages and disadvantages to using observations as a research method, I will leave the discussion at this, because it is unlikely that observations will ever become a major method of LLS investigation given the nature of LLS.

### **Verbal Reports**

Of all the investigative instruments used in LLS research, verbal reports seem to be the one that receives the most attention in the literature. The reason for this may be its potential usefulness as the most accurate method by which a researcher can

discover what cognitive processes are occurring in LLS use. The validity and reliability issues that plague verbal reports also add to its popularity as a topic in LLS research.

There are three basic categories of verbal reports: self-report, self-observation, and self-revelation (Cohen, 1984). In certain ways, they are similar to interviews, especially the first two. They are like interviews specifically concerned with thought processes.

Self-report refers to the descriptions by learners of what they do, characterized by generalized statements about learning behavior (e.g., ‘When I want to learn a new word, I write it down and repeat it aloud several times’) or labels that the learners apply to themselves (e.g., ‘I’m a “slow speaker.” I like to take my time and carefully select the words that I will use, especially words or expressions that I have learned recently.’). These statements are usually based on beliefs or concepts that the learners have about the way they learn languages or the way they should learn languages, and are not often based on recent observation of a specific language event (Cohen, 1984).

Self-observation refers to the inspection of specific language behavior in a specific language event, either while the information is still in short-term memory, i.e., *introspectively*, or after the event, i.e., *retrospectively* (usually after twenty seconds or so). Retrospection can be immediate (within an hour of the event) or delayed (taking place hours, days, or weeks after the event). It appears that most forgetting takes place very soon after the mental event (Cohen, 1984). How soon is a matter of debate.

Self-revelation is neither a description nor inspection by the learner. It is the concurrent disclosure of thought processes while they are taking place. These are also called think-aloud procedures or think-alouds, first introduced to LLS studies by Hosenfeld (Harlow, 1988). Ideally, the data is unanalyzed, honest, and unedited, but it is no easy task to elicit stream-of-consciousness information that has not in some way been subjected to monitoring or reflection, and consequent tampering (Cohen, 1984).

It should be noted that we speak of concurrent and retrospective reports as if we can clearly distinguish between the two, yet in real time the differences blur (Kamil, Pearman, Mosenthal, & Barr, in press).

There are at least six major factors which characterized the data obtained from the three categories of verbal reports: number of participants, the research context, the recency of the event, the mode of elicitation and response, the formality of elicitation, and the degree of external intervention (Cohen, 1984). I would suggest a seventh factor: the speed and accuracy with which the language learner needs to be able to relate his/her thoughts in the L2. Take the case of a low-intermediate level EFL learner. This subject may do fine answering the questions of a self-report but may not have the verbal skills in place to effectively do a think-aloud.

As noted by Cohen (1984), over the years, verbal reports have enjoyed the support of respectable researchers (e.g., Bakan, 1954; Radford, 1974; Lieberman, 1979; White, 1980; and Ericcson & Simon, 1980). There are several **advantages to using verbal reports as an investigation instrument for LLS studies:**

1. As mentioned earlier, verbal reports are potentially the most accurate source of information on the actual use of LLS. They attempt to discover what the learner actually does, unlike a questionnaire, which asks a learner what he/she believes or thinks about his/her LLS.
2. There are reflexive benefits to doing verbal reports. By giving verbal reports, the learner becomes more aware of his/her own LLS use and this may motivate the learner to learn more about his/her LLS, be more attuned to the use of LLS, or help improve language skills (Cohen, 1984; Cohen, 1996).

As for **disadvantages/validity problems**, we have the following:

1. It may be that subjects do not have conscious access to their mental processes but have access only to the products of those processes (Selinger, 1983). If this is the case, verbal reports cannot adequately investigate LLS.
2. As Cohen states, “there may, in fact, be a second-language threshold below which attempts to provide verbal report in the target language is counterproductive” (Cohen, 1996). This goes back to my inclusion of a seventh factor which characterizes the data obtained from verbal reports.
3. Verbal reports can reflect general intelligence, the desire to give a certain answer to please the researcher/teacher, and so on (Politzer & McGroarty, 1985).
4. Even if verbal reports do tell us *what* a language learner is doing, they may not be able to tell us *how* that language learner is selecting or using the LLS (Cohen, 1984).
5. Even if a language learner is able to accurately report about his LLS, the research may not be able to understand how that rule fits into that language learner’s

interlanguage, given that the language rule systems held by the researcher and by that language learner may be different (Cohen, 1984).

6. Verbal report procedure may interfere with introspection and accurate reporting on introspection (Cohen, 1984).
7. The language learning task that is given to the student for the sake of the verbal report may be inauthentic. That is, the language learning task in the verbal report research is artificial to some degree and this may alter the subject's more nature selection and use of LLS (Cohen, 1998).

Over the years, there has been an ongoing debate between the proponents and critics of verbal reports. Ericsson and Simon's (1984) Protocol Analysis is considered the authority on the subject of verbal reports according to Cohen (1996) and Pressley & Afflerbach (1995), and it contains a discussion on two of the major papers that criticized verbal reports: Verplanck and Oskamp (1962) and Nisbett and Wilson (1977).

Verplanck and Oskamp claim to have demonstrated that verbalized rules are dissociated from the behavior they were supposed to control. By having subjects verbalize the rules they were using in sorting a set of illustrated cards, the experimenters could reinforce either the verbal rule or the placement of the cards (i.e., the behavior). This was a criticism of concurrent verbalization. However, in a replication and analysis of this study, Dulany and O'Connell (1963 as cited in Ericsson & Simon, 1984) found that on all but 11 of 34,408 trials, the rules verbalized by the subjects matched their behavior.



In the other major criticism, retrospective verbal reports came under attack. Nisbett and Wilson (1977, p. 233 as cited in Ericsson & Simon, 1984) conducted an extensive review of studies that permitted evaluation of retrospective verbal reports. They summarized their findings in the following manner:

People often cannot report accurately on the effects of particular stimuli on higher order, inference-based responses. Indeed, sometimes they cannot report on the existence of critical stimuli, sometimes cannot report on the existence of their responses, and sometimes cannot even report that an inference process of any kind has occurred.

There have been several criticisms of their findings: many of the verbal reports they discuss could be generated with accessing memory of the corresponding cognitive processes; several aspects of the verbal report procedures reviewed by them made the relevant thoughts less accessible; and in some of the studies reviewed by them, subjects were asked to report information that cannot be given even with complete access to the thought processes (such as why-questions regarding causes). After having examined what at the time were the two most vigorous challenges to the usefulness of verbal reports, Ericsson and Simon dismiss these criticisms of verbal reports and concluded that verbal reports, especially concurrent reports and retrospective reports of specific cognitive processes, were a useful and valid method for investigating thought processes (Ericsson & Simon, 1984).

Another major attack on verbal reports came from Selinger (1983), who claimed that mental processes are beyond the reach of introspection. If language

learning takes place at the subconscious level, then it is inaccessible to mental probing. Selinger asserts that verbal reports can at best be used to talk about the products of mental processes. To use what learners say about their behaviors as evidence of mental processes, however, would be a matter of equating performance and competence (Seliger, 1983). However, studies have supposedly demonstrated that subjects can successfully consult their memory of cognitive processes and describe them. In other words, subjects do have accessible memory of such processes and awareness of the information while the process is in progress (Ericsson & Simon, 1980).

Despite the potential usefulness of verbal reports in LLS studies, so far verbal reports have been used primarily to assess language use rather than language learning (Cohen, 1984). We will no doubt see more LLS investigations with verbal reports in the future, even though the debate on validity and reliability will likely remain.

### **Diaries and Dialog Journals**

One of the problems with LLS studies is that they typically are short-term projects--a one-time questionnaire, a month-long observation, a few sessions of verbal reporting. These studies typically are not used to observe changes in strategy selection and use over time as the learner becomes more proficient, to see the entire range of uses of an LLS in a variety of learning situations, nor to find out about LLS use at various times during the day. One of the advantages of diaries (also known as "first-person journals") and dialog journals is that they can be used for longitudinal LLS studies to qualitatively investigate these concerns. Dialog journals differ from

diaries in that a reader periodically responds to the journal entries. Another advantage of journals are that learners tend to write about what is significant or of interest to them (Bailey, 1991), and attitudes and beliefs about learning have been shown to have an impact on learning. Journals can also be of reflexive benefit for the students, allowing them to learn more about their own LLS (Cohen, 1998).

There are four disadvantages or problems with journals for LLS studies. First, the amount of data can end up being voluminous unless guidelines are set to maximize conciseness (Cohen, 1998). Second, diaries have been described as the least structured instrument for data collection in second language acquisition (SLA) research (Faerch & Kasper, 1987). Diaries do not, therefore, lend themselves to statistical analysis. The entries can be too random in nature unless guidelines are set as to appropriate content, though such guidelines could prevent what might otherwise become very rich and useful data (Cohen, 1998). Third, the typically small number of subjects restricts the researcher from making generalizations from the findings (Bailey, 1991; Nunan, 1992). Fourth, keeping a journal on a regular basis can be a time-consuming project, and for that reason, a potential subject might not want to participate in such a project.

Journals are not in wide use in LLS research at this stage. A particularly interesting project would be a journal kept by a motivated LLS researcher who logs his/her progress from point zero in the learning of an L2 to an advanced level of proficiency.

### **Recollective Studies**

In LLS research, recollective studies have also be referred to as “open-ended strategy surveys” and “open-ended narrative type surveys” (Oxford, 1993).

Recollective studies involve thinking back to some prior language learning experience and trying to descriptively recount the experience. It allows the subject to speak about prior experiences that were significant to him/her. This is not a method in high use in LLS research, though it has been done with subjects writing narrative or poems about their LLS (Oxford, Lavine, Felkins, Hollaway, & Saleh, 1996).

Recollective studies could also take the form of transcribed interviews about prior language learning experiences (Cohen, 1998).

One of the advantages of recollective studies is the objectivity with which the subject may speak about his/her prior language learning experiences. Another advantage is that recollective studies produce highlights rather than superfluous details. Also, subjects may gain important insights about LLS by reflecting on significant learning experiences (Cohen, 1998).

The disadvantages with this method are related to the distance between the language learning experience and the recollection of it. Memory can be lost over time and memory is susceptible to creative reconstruction (Cohen, 1998).

### **Computer-Assisted Strategy Assessment (CASA)**

Computer-assisted strategy assessment (CASA) is a research method that assumes that the use of certain resource functions on a computer--such as the online dictionary, style checker, and other functions—are associated with certain LLS.

Furthermore, other aspects of computer use, such as pausing before typing, can be used to investigate LLS. Though limited research has been done to the application of CASA to LLS research, it is an area that is gaining increasing attention because of the advantages of online LLS data collection. First, CASA is unobtrusive. The subject will be aware of the data collection in that he/she will have given consent to have their computer work “observed.” However, during the actual language learning tasks on computer, it is hoped that the subject will not feel that he/she is being observed (Cohen 1998). Second, CASA has been useful in extending the ability of the researcher to document language learning behaviors in contexts in which large amounts of precise data needed to be tabulated (Chapelle, 1996). Third, CASA allows for gathering of strategy data during actual instructional exchanges (Chapelle, 1996).

Unfortunately, serious problems exist in CASA research. First, computers are very limited in the kinds of strategies that they can investigate. Though computer use can be demonstrated to relate to LLS such as advance preparing and output monitoring, a researcher would be very hard-pressed to find a way to measure LLS like guessing the meaning using existing linguistic knowledge or listening strategies. In other words, the LLS must result in a concrete manipulation of the computer functions for it to be observed (Cohen, 1998). Second, some subjects are more comfortable than others with computers and how to use the resource functions, and this computer knowledge, not differences in LLS, may effect the data (Baily, 1996). Third, there are the practical problems of appropriate software design, modification, and data collection. These problems are not insurmountable, but they are

nevertheless real problems that the LLS researcher would have to overcome (Chapelle, 1996). Fourth, construct validity issues exist in CASA (Chapelle, 1996), such as explaining how a researcher is able to infer that a subject is employing the strategy of advance preparing by simply observing the amount and length of pauses before typing responses. Fifth, data collected from computer use will show how a subject avails him-/herself to the computer resource functions, not how he/she naturally uses LLS. For instance, though a given subject may not frequently use the LLS of looking up unfamiliar words in a dictionary, because it is a prominent or easily accessible function on the computer being used, the subject might use a dictionary more frequently than he/she normally would .

### **Task Product Analysis**

Akin to CASA, task product analysis looks at the performance products of language learners with an eye to associating them with LLS use. Task product analysis has some of the same advantages and disadvantages of CASA. One noticeable difference is that only traditional study and schoolwork performance skills are needed, not computer know-how. Another difference is that tallying the data may be much more time-consuming depending on the project.

So far, it seems that work has only been conducted on communication strategies (Bialystok, 1990; Abraham & Vann, 1996), but this method could be adapted to LLS research. However, like CASA, it is a method that is riddled with serious problems. In Chapter Eight, however, we will encounter a use of task products (portfolios) as evidence of LLS selection and use. In this regard, informal

task product analysis by the student and teachers can provide valuable insights that can help the student with the design of strategic action plans for language learning.

### **Anecdotal Information**

Almost never explicitly discussed in the literature yet widely used in LLS research is anecdotal information, usually from teachers, about learners' LLS selection and use. With anecdotal information, the LLS researcher is simply relying on hearsay; but depending on the depth of experience of the teacher in question, the LLS researcher may consider the teacher a rich source of preliminary information about LLS.

### **Methods by Which LLS Selection and Use are Measured against Learning**

#### **Outcomes**

We have looked at the methods by which LLS are discovered and studied. These can be called “descriptive studies” (McDonough, 1995). Now we can turn our attention to the methods by which the selection and use of LLS are measured against learning outcomes (in LLS effectiveness validation studies). For the sake of this paper, “learner success” and “learner results” will fall under the inclusive heading of “learner outcomes.” There are two approaches to determining the influence of LLS on language learning outcomes: an ex post facto approach and an experimental (or interventionist) approach (Gu, 1996). These comprise what have been called “correlational studies,” studies that investigate the correlation between learning outcomes and LLS selection and use.

In the ex post facto approach, researchers use proficiency tests or other methods to separate more successful learners from less successful ones. Next, the LLS of the two classes of learners are determined and these LLS are then associated with their success or failure (Gu, 1996). Ex post facto research investigates what we can call “learner success.” There are two types of ex post facto studies: 1) studies that measure L2 proficiency and learner success at one moment in time (State A) and 2) studies that investigate L2 proficiency at the beginning of a non-interventionist study and then at the end of that study (from State A to State B). I suggest that we can call the first type “one-shot” descriptive studies and the second type “before-and-after” descriptive studies. Neither types of studies attempt to manipulate the learners’ LLS selection and use.

Though Gu uses the term “experimental” approach, I will use the term “interventionist” as used by McDonough (1995), since “interventionist” more strongly implies LLS training by researchers. Also, these studies lack features of true experiments (such as random sampling). Furthermore, there seems to be some confusion over the term “experimental” among LLS researchers. For Gu (1996), studies in which researchers manipulate LLS and examine learning outcomes are “experimental” and fall under the heading of “correlational studies.” For O’Malley and Chamot (1990), “experimental” studies have mostly be conducted in the domain of cognitive psychology, and do not fall under the heading of “correlational studies.” So for O’Malley and Chamot, interventionist studies (though they do not call these studies by this name) are a kind of correlational study, while “experimental studies” are something different.



In interventionist studies, the use of LLS by learners is manipulated, then the learning outcomes are examined (Gu, 1996). Interventionist research investigates what we can call “learner results.” Like before-and-after studies, interventionist research investigates L2 proficiency at the beginning of a study and at the end of a study (from State A to State B); however, in interventionist research, LLS are manipulated by the LLS researchers.

Having chosen one of these approaches, the LLS researcher is faced with the task of answering the following questions:

- Do learner-strategies contribute to the development of language competence?  
(Carver, 1984) How can this be proven?
- How do the use and selection of LLS change as learners become more proficient in their L2? (Chamot & O’Malley, 1993)
- If more than one LLS is observed, can the significance of one be compared to the significance of the other(s) in terms of their effect on the learning process?  
(Harlow, 1988)
- Can the possible synergy of the two (or more) LLS be shown in comparison to the effect of using strategies separately?
- Can the appropriateness of the use of the LLS be demonstrated?
- Is a teacher able to control the use of LLS or promote the development of LLS?

One of the problems with ex post facto methods is that the information that the subjects give about their LLS might be inaccurate, as seen in the previous discussions of the validity and reliability problems with the methods of LLS investigation. Another important problem is that correlations between LLS and

achievement might not be justified. For instance, the type of achievement test that is used can obscure some of the behavior/achievement correlations (Poltzer, 1983).

## **Conclusion**

Gu (1996) comments that LLS investigatory research has been likened to what Skehan (1989) calls “trawling,” in that researchers went out into the field with little knowledge of what they would discover about LLS or how they would get LLS information. The trawling approach can be criticized on three accounts. First, this approach is likely to be biased in terms of social, educational, and other factors of the sample selected. Second, we can never be certain whether we have trawled up the most salient LLS in the investigative research, if we are able to trawl them up at all. Third, trawling may produce varieties of LLS in need of categorizing, but without a predetermined categorization scheme in place, the researcher is left to organize the LLS as best he/she can (Gu, 1996).

The various methods of investigating LLS have provided us with much valuable information about LLS. However, these methods are far from perfect, and the task of improving the instruments of LLS research will remain one of the great challenges of the LLS researcher. A prediction of LLS research to come has combinations of instruments used for triangulation of findings. We will see if this prediction comes true.

## V. MAJOR FINDINGS OF RESEARCH ON LLS

### “The Good Language Learner”

One of the major events in the history of LLS research was the publishing of Joan Rubin’s (1975) article “What the ‘Good Language Learner’ Can Teach Us.” Rubin is credited with having made “the good language learner” a research entity (Harlow, 1988). This and similar research efforts lead SLA researchers to the conclusion that LLS were one of the main factors, if not the main factor, that distinguishes the good language learner from other learners. A discussion of studies of the good language learner is particularly important to a study of LLS and advanced language learners, since the focus of such studies is to investigate the LLS of successful (usually advanced) L2, L3, or L4 learners with the view of using the findings to help less successful learners.

Like Ervin-Tripp (1970), Rubin was frustrated with what she perceived as too much attention being paid to language input to the learner and not enough attention being paid to what the learner does to learn a language. Her interest in this matter led her to observe and interview language students at Stanford University. She identified seven characteristic strategies of the good language learner (Rubin, 1975):

1. The good language learner is a willing and accurate guesser.
2. The good language learner has a strong drive to communicate, or to learn from communication.
3. The good language learner is often not inhibited.
4. The good language learner is prepared to attend to form.
5. The good language learner practices.

6. The good language learner monitors his own speech and the speech of others.
7. The good language learner attends to meaning.

Rubin goes on to acknowledge that LLS may vary (even for the successful learners) with respect to the following factors (Rubin, 1975):

1. The task
2. The learning stage
3. The age of the learner
4. The context
5. Individual styles
6. Cultural differences

I have not found reference to these six factors in other summaries of Rubin's article on the good language learner, despite the importance of her recognition that LLS and the very concept of the good language learner depend on certain factors. The second factor mentioned, the learning stage, is especially noteworthy in this essay on the advanced language learner.

The other work on the good language learner that has gained a great deal of attention is The Good Language Learner by Naiman, Frolich, Stern, and Todesco (1978). Based on Stern's (1975) intuitive and observed list of LLS, Naiman et al. attempted to discover the LLS used by successful language learners through a more empirical approach. They interviewed 34 successful language learners and 2 unsuccessful ones (though they had originally wanted to interview many more unsuccessful language learners than this) and observed 72 high school students studying French as a second language in six Canadian schools. Regretably, few LLS

were identified from the high school observations; prolonged observation of language learning to isolate specific LLS did not prove successful. The interviews produced the following five “strategies” (which we may want to call “characteristics”), which characterize all successful language learners (Naiman et al., 1978):

1. Good language learners actively involve themselves in the learning task.
2. Good language learners develop or exploit an awareness of language as a system.
3. Good language learners develop and exploit an awareness of language as a means of communication (i.e., conveying and receiving messages) and interaction (i.e., behaving in a culturally appropriate manner).
4. Good language learners realize initially or with time that they must cope with the affective demands made upon them by language learning and succeed in doing so.
5. Good language learners constantly revise their L2 systems. They monitor the language they are acquiring by testing their inferences (guesses), by looking for needed adjustments as they learn new material, or by asking native informants when they think corrections are needed.

Naiman et al. are remembered for describing certain characteristics that are found in all good language learners. Since this was considered their major contribution, summaries of their research in other pieces gives the reader the impression that they are describing only a single set of predetermined characteristics that apply to all good language learners. A closer examination of their findings, however, shows that they discovered both an invariable set of characteristics (ones that seems to necessarily apply to all good language learners) and a variable set of characteristics (ones that apply to some good language learners but not to others) that

describe the good language learner. With the exception of an article by Rees-Miller (1993), the initiate reader would not know this from reading descriptions of the Naiman et al. Study in the literature reviews found in other LLS research studies. This point is important because it hints at the fact that there is more than one route to success in language learning. That is, there is no single comprehensive set of characteristics that could define the good language learner.

Though Naiman et al. were able to examine the importance of cognitive and affective variables in foreign language learning, it is disappointing that they were not successful in observing LLS. No relationships were, therefore, identified between the use of strategies and learner variables (Graham, 1997).

Despite the attention given to the Rubin study and the Naiman et al. study, I have not found in my extensive review of the summaries of these studies by other authors any attention paid to the fact that Rubin is concerned with the behaviors and mental practices of the good language learner and that Naiman et al are concerned primarily with the attitudes and awareness of these learners. It is only with the fifth characteristic in the Naiman et al. Study that we really see any commonality between the findings of the two studies.

Rees-Miller (1993) has compiled the findings of a number of studies of the good language learner, including the Naiman et al. study and a later work by Rubin. She found that all of the researchers shared **common observations**, which I put into list form below:

1. In the area of cognitive strategies, good language learners are believed to seek clarification, verification, and meaning; ask questions; make inferences; and use

- deduction (Ellis & Sinclair, 1989; Naiman et al., 1978; O'Malley, Chamot, Stewner-Marizanares, Russo, & Kupper, 1985; Oxford, 1990; Rubin, 1987; Stern, 1980).
2. Good language learners see the target language as a system amenable to understanding through analysis and reasoning (Naiman et al., 1978; Oxford, 1990; Rubin, 1987; Stern, 1980).
  3. Good language learners use their memories efficiently, practice, and self-evaluate in order to achieve accuracy (Ellis & Sinclair, 1989; Naiman et al., 1978; Oxford, 1990; Rubin, 1987; Stern, 1980).
  4. In the area of metacognitive strategies, good language learners organize their learning around preferred learning techniques and choose, prioritize, and plan their learning (Brown, 1991; Ellis & Sinclair, 1989; Oxford, 1990; Rubin, 1987; Stern, 1980).
  5. Good language learners do not neglect socioaffective factors that contribute indirectly to learning. Because good language learners know that language is communicative, they will seek ways of practicing the language and maintaining conversation (Naiman et al., 1978; O'Malley et al., 1985; Rubin, 1987; Stern, 1980).
  6. Good language learners will be aware of affective factors that may undermine learning, and they have a tolerant and empathetic attitude toward native speakers of the target language (Naiman et al., 1978; Oxford, 1990; Stern, 1980).
  7. Above all, the good language learner is an active participant in the learning process (Ellis & Sinclair, 1989; Naiman et al., 1978; Stern, 1980; Wenden, 1985).

To Rees-Miller's compilation, we can add **some other findings**. These were originally found in a literature review on LLS research by Oxford (1993), with the exception of the underlined studies:

- Successful language learners generally use more LLS and more appropriate LLS (for the language task) than do less successful learners (Hosenfeld, 1977; Naiman et al., 1975; Papalia & Zampogna, 1977; Ramirez, 1986; Rubin, 1975; Stern, 1983; Tyacke & Mendelsohn, 1986; Chamot & O'Malley, 1993).
- Successful language learners are able to combine effective LLS. They tend to select LLS that work well together in a highly orchestrated way, tailoring their use of LLS to the requirements of the language task (e.g., Chamot & Kupper, 1989; Vann & Abraham, 1989).
- Successful language learners can fairly easily explain the LLS they use and the reasons why they employ them (e.g., Lavine & Oxford, 1990; O'Malley and Chamot, 1990; Abraham & Vann, 1987). That is, successful language learners are aware of their LLS.
- Successful language learners often use cognitive LLS and metacognitive LLS together in a way such that the two support each other (e.g., Oxford & Crookall, 1989).
- Successful adult language learners appear to engage in mental operations that are more elaborate than those of less successful adult students. For instance, when provided with input by the teacher or by peers, successful students are found to identify elements of information, to explore related forms, to establish connections between existing and new knowledge, to resolve discrepancies



between these two sources of information, and to create hypothetical rules. This can also be seen as a higher level of construction of information (Corbeil, 1990).

- Successful language learners might pay attention to both form and function of language, while the less successful learners might only pay attention to function (Abraham and Vann, 1987).

In light of all the talk about what characterizes the good language learner, it is also important not to forget to characterize the less successful L2 learner, who has not received nearly as much attention as the good language learner. The general assumption for many years was that the less successful language learner had fewer LLS than the good language learner and had fewer types of LLS. The kinds of LLS used by less successful L2 learners were seen as “bad” or inefficient types of LLS, ones that involved non-communicative or mundane behaviors such as translation with the heavy use of dictionaries, rote memorization, folding papers into columns to create vocabulary self-tests, and uncreative forms of repetition. In a dissertation by Nyikos (1987) mentioned by Oxford (1993), it was also assumed that less successful L2 learners were not particularly aware of their LLS and that they could not easily describe their LLS. Furthermore, less successful L2 learners are seen as less active LLS users than their more successful counterparts. However, evidence suggests that less successful L2 learners actually are aware of their own strategies and can identify their own strategies, but do not know how to choose them appropriately or link them (Block, 1986; Galloway & Labarca, 1991; Stern, 1975; Vann & Abraham, 1990). Oxford (1993) suggests that some less successful learners may fit the earlier descriptions of less successful learners and some fit the later descriptions.

The major difference in terms of LLS between less successful L2 learners and good L2 learners is that the former do not use LLS as appropriately as the latter, which may in part mean that less successful L2 learners do not demonstrate the same orchestration or creativity in LLS use as good L2 learners (Lavine & Oxford, 1990; Vann & Abraham, 1989; Porte, 1988). We would do well to consider differences in LLS selection and use from the perspective of differences in motivation. Considering how important the role of motivation might be on LLS selection and use, it is surprising that more attention is not paid to this issue in LLS literature.

### **Counter-evidence to and Criticisms of the Findings of the Good Language**

#### **Learner Studies**

Interest in LLS as an area of study has increased over the years, and in almost every literature review or research paper, studies of the good language learner are discussed. From my review of literature, it is evident that almost all LLS research is done with the intent of contributing to our understanding of what distinguishes the more successful language learner from the less successful one. Along with all this attention to the good language learner has come counter-evidence to and criticisms of several of the findings from these studies. This section will proceed from the more highly detailed to more general problems with the good language learner. I should also make clear that some of the following points are not criticisms, but rather qualifications.

LLS researchers use the expressions “good,” “successful,” “more successful,” and “less successful” to describe types of learners, but what do these terms really

mean? Is there a certain threshold that qualifies “success”? Or when contrasting the more successful learner from the less successful one, aren’t they more or less successful in certain areas of language learning? Standardized test scores are often used to separate more and less successful L2 learners, but on certain specific types of tasks on these tests, the “less successful” students (the ones with the overall lower score) might very well have outperformed the “more successful” students. The difficulty here is that there are many aspects of language competence and language learning, and any discussion of more and less successful learners needs to be aspect-specific (in terms of vocabulary building, pronunciation development, etc.).

Even in task-based descriptions of these learners, it may be extremely difficult or impossible to determine whether students were more or less successful than each other. For instance, a single task or function, such as using language to purchase a stamp at the post office, can take different linguistic forms that can be equally successful in fulfilling the goal of the task, such as “I’d like a 60 cent stamp” or “Could I get a 60 cent stamp, please?” In this scenario, success could be looked at in terms of functional success (success in terms of simply getting the stamp), sociolinguistic success (success in terms of using appropriate register), discourse success (success in terms of using appropriate pauses/timing or appropriate give-and-take in the dialogue), linguistic success (success in terms of avoiding errors or using complex expressions), or other measures of success. LLS researchers seem to equate success with linguistic success, and do not take into account communicative competence—including Canale and Swain’s (1980) distinctions between linguistic,

sociolinguistic, discourse, and strategic competence. I say that this is a serious charge against much of LLS research.

Even if we clear up the above problems concerning more and less “successful” language learners, we might not be able to use these characterizations across levels of proficiency. As Politzer and McGroarty (1985) assert, “depending on the level of proficiency or the frequency with which a particular behavior is employed, the same learning strategy may be variously an intrinsically good learning behavior, a sign of lack of progress, an indication of assiduity, and so on.” (As we will see shortly, there is good reason to take issue with the idea of “an intrinsically good learning behavior.”) Let’s consider the strategy of imitating the pace and speech patterns of native speakers, and let’s say that for various types of advanced level L2 learners, this turns out to be an LLS that positively predicts success with pronunciation development. If we say that this characterized “good language learners” and try to encourage beginning level students to use this LLS, we would likely find that this LLS does not lend itself for appropriate use by beginning level students. This LLS, though appropriate for advanced learners, is inappropriate for beginning learners. In short, characteristics of successful higher level learners might not be the same as characteristics of successful lower level learners. Considering that most of the studies on the good language learner have been on highly proficient L2 learners and that LLS research on the good language learner is done with the intent of passing down advice to less successful L2 learners, this is a critical point and one that is often overlooked in LLS research.

When investigating “the good language learner,” researchers typically looked to advanced learners to discover the characteristics of successful learners, in that the advanced language learners were seen as having proven themselves successful at language learning. A “successful language learner” should not necessarily be viewed as someone who has attained a high level of proficiency (e.g., a high intermediate or advanced learner), however. Even a relatively unsuccessful language learner can achieve an advanced level of ability in some aspects of an L2 (such as formal grammar rules) after many years of study. Instead, a successful language learner should be viewed as someone whose method of language learning is a very conducive one for language learning (for that particular person). So even beginning L2 students can be successful language learners if their method allows for relatively thorough, efficient, and quick learning of the L2 (Ioup, Boustagui, Tigi, & Moselle, 1994).

Another question concerns the concept of a “characteristic.” In LLS research involving observation, CASA, task product analyses, journals, or think-alouds, how can an LLS or learner concern be called a “characteristic” if it is observed in only a very limited number of tasks? A characteristic should prove an individual trait true over time. For this reason, research that uses these instruments will also need to use interviews, questionnaires, verbal reports, or recollective studies to determine the frequency of use of the LLS before it can be defined as “characteristic” of a type of learner. And still, this matter is not resolved, because frequency is not a reliable measure of consistently successful use of an LLS over time (Politzer & McGroarty, 1985). For instance, a successful language learner may profit from employing a certain LLS sparingly, and, by doing so, use that LLS in a most appropriate manner.

Now let's look first at the Rubin (1975) study. Her findings on the good language learner have gained wide acceptance over the years. Due to the broad applicability of her remarks (e.g., the good language learner practices"), her findings ring true on an intuitive level. However, the third characteristic of the good language learner, that of being uninhibited, may be looked upon as questionable in light of research conducted by Horwitz and Young (1990), which was cited in Oxford's (1993) discussion of Rubin's findings. They contend that many potentially excellent L2 learners are naturally inhibited due to language anxiety. Such learners combat inhibition by using positive self-talk, by practicing extensively in private, and by putting themselves in situations in which they have to participate communicatively. In that Rubin contends that the good language learner is "often" not inhibited—a statement that I suspect all SLA researchers would acknowledge as a fair assessment—I doubt that the findings of Horwitz and Young do any damage to Rubin's claim.

Another problem comes with Rubin's first characteristic, that of being a willing and accurate guesser. It remains true that this typically characterizes successful language learners. In fact, this strategy of guessing or inferring from context continues to be viewed as the LLS that is most likely to appear in the strategy inventory of successful language learners. The problem is not with Rubin's claim that this LLS characterizes good language learners; the problem is with this LLS itself. The possession of this LLS in one's LLS repertoire and its frequent use are justifiably cited as positive traits in the L2 learner, but we should be wary of equating this LLS with guaranteed success in the learning of an L2. It is, in fact, not a

particularly reliable method of learning. Studies by Seibert (1945), Saragi, Nation, and Meister (1978), and Clarke and Nation (1980) found that most but not all words could be guessed from context. However, use of this LLS will lead to the learning of incorrect information at times, since no learner can accurately guess meaning from context 100% of the time.

Concerning the Naiman et al. study (1978), the first LLS of the good language learner mentioned is that this learner is actively involved in the learning task. As noted in the Rees-Miller review (1993), other researchers have found this to be true, as well (e.g., Ellis & Sinclair, 1989; Stern, 1980; Wenden, 1985). It has often been presumed that the less successful language learner is, consequently, less active. However, some studies, such as the one by Abraham and Vann (1990), indicate that less successful learners can be just as active as successful ones. It is not clear from this study whether or not the less successful learners were actively using the same LLS that the more successful learners were.

Naiman et al. (1978) also attest to the positive significance of awareness about one's language and LLS, and again, as a general rule, they seem to be correct. It is just this sort of awareness and its positive effects on learning that proponents of LLS instruction rely on. The idea is that learners who are not only taught more LLS, but who are also made more aware of their LLS, will improve their language learning skills, and this will in turn lead to gains in proficiency. This idea is supported by a number of influential LLS researchers (e.g., Cohen, 1990; Ellis & Sinclair, 1989; Rubin, 1987). As Rees-Miller points out, however, "there is no empirical evidence to show that awareness of strategies is a causal factor in L2 learning success" (1993, p.

681). It is reasonable to question whether class time should be devoted to awareness raising—with learner training books recommending that 20% or more of classroom time be spent on learner training (Ellis & Sinclair, 1989)—considering input/outcome ratios. With some researchers going so far as declaring that “overt strategy training is essential in the language classroom” (Oxford, 1990b), the attempts of teachers to teach LLS and increase students’ awareness of their LLS might result in inefficient use of classroom time. More evidence is needed to prove the worth of explicit LLS training and more studies are needed to distinguish more effective LLS training methods from less effective ones. More on this subject will be discussed in the next chapter on LLS instruction.

The findings in Rees-Miller’s compilation of characteristics of good language learners would likely gain general approval from fellow LLS researchers. That is, these findings do seem to describe good language learners in general. However, not all of these characteristics are universally accepted. Consider the sixth characteristic: good language learners will be aware of affective factors that may undermine learning, and they have a tolerant and empathetic attitude toward native speakers of the target language. Ellis (1997) reports on a study that found that less integratively oriented Mexican women in California were more successful in learning English than those who were more integratively oriented. Their type of motivation might be called Machiavellian motivation—the desire to learn the L2 in order to manipulate and overcome the people of the target language.

If one were to find fault with Rees-Miller’s compilation of general characteristics which she found in six studies of good language learners, one could



say that it is not sufficiently comprehensive of the general findings from the good language learner studies. It should be noted that Rees-Miller might not have had as a goal the compilation of an all-encompassing list of good language learner attributes, but instead aimed at constructing a more specified account of the findings for the sake of her immediate research concerns, and that would be fine.

Concerning Corbeil's (1990) observation that successful adult language learners appear to engage in mental operations that are more elaborate than those of less successful adult students, this seems true in a sense. Elaboration of mental processes in itself, however, cannot be said to be a predictor of language learning success and can in some cases actually be problematic. For instance, *overmonitoring* can impede successful learning.

One of the major problems that I see with the lists of the good language learner is that they do not actually serve to distinguish the successful language learner from the less successful language learner. Some studies have found that advanced level learners are average users of LLS (LoCastro, 1994; Graham, 1997), so amount or frequency of LLS use may not distinguish successful language learners. Also, assumptions about less successful language learners have not held true, and several (if not most) of the characteristics of good language learners are found to represent less successful learners. As Vann and Abraham (1990) discovered, unsuccessful learners used relatively many LLS, used the same types of LLS as successful language learners, and are active learners like successful learners. Furthermore, characteristics and LLS that have been attributed to successful learners have not been found to correlate with learning outcomes. For instance, in a study done by Politzer and

McGroarty (1985), Asian students were found to exhibit fewer of the assumed “good” LLS than Hispanic students, yet the Asian students actually made greater gains in linguistic competence and communicative competence than the Hispanic students. It is, however, unclear whether the greater short-term gains by Asian students could have been due to the Asians coming into the ESL course with a lower baseline proficiency than the Hispanics.

So we see that some or all of the characteristics of the good language learner apply to less successful language learners, and our earlier assumptions about the less successful language learner have not held true. One of the reasons for this is that the use of particular LLS in and of themselves is not sufficient to lead to success, as implied by Porte (1988) and Vann and Abraham (1990). It is the appropriate selection and use of LLS that predict success, not simply the possession of those LLS in one’s strategy inventory. A related concern is that appropriate selection and use of LLS no doubt involves appropriate sequencing of LLS combinations; this is a concern that is not adequately addressed in studies that have tried to distinguish more successful from less successful language learners. Furthermore, LLS are only one factor that affect language learning. There are many other factors that play an important role in second language acquisition.

One might think that what is needed now are more detailed lists of the characteristics of the good language learner and the less successful language learner, with the descriptions of each of these two types of learner being completely inclusive (including all pertinent characteristics and mentioning whether or not these characteristics can be found in the other type of learner) and exclusive (excluding

characteristics that do not characterize each type of learner). However, a strong case can be made that we should no longer pursue the study of general characteristics of the good and the less successful language learners. I believe the strongest criticism of the findings from studies of the good language learner is that there really is no such thing as “the” good language learner. In fact, the dismissal of the myth of “the good language learner” with the predetermined characteristics and the secret gimmicks is one of the most significant achievements in LLS research (Gu, 1996). By the end of this chapter, we will see that there is no single set of characteristics that can be used to describe the successful language learners, given different cognitive styles, cultural backgrounds, and other factors (Wong Fillmore, 1983). This is not to say that we should abandon studies that seek to differentiate between more successful and less successful learners. This is just the sort of research we need. Instead, we should be wary of attempts to construct sets of characteristics of more and less successful learners that do not account for salient factors, such as cultural background, which weigh into the LLS use and SLA equation. Also, there may be some justification for speaking of types of successful learners under certain categories of factors, such as aptitude, cultural background, etc. These factors are considered in greater detail at the end of this chapter and in Tables 5.1 and 5.2.

All the above comments having been made, there may be one characteristic that can be said to apply to all successful language learners yet do not apply to less successful language learners. This is appropriate selection and use of LLS. Researchers now need to account for what qualifies as “appropriate.”

### **The Correlation between LLS and Learning Success**

Though one area of study in LLS research, that concerning “the good language learner,” has not held up well over time, the findings of another area have. On a bright note, correlational studies have generally found that there is a relationship between LLS selection and use and learning outcomes, and it seems that this relationship is a relatively strong one. This helps validate continued interest and research in LLS.

Findings in the Learning Strategies in Foreign Language Instruction project, a three-year investigation of aspects of LLS used by foreign language students and their teachers, indicate that no matter what degree of success in learning a foreign language, all students have some cognitive control over their learning efforts (Chamot & Kupper, 1989). Additionally, as we saw in the previous section, many researchers have found that conscious use of appropriate LLS typifies good language learners (Ehrman & Oxford, 1989). Nevertheless, it is one thing to find that LLS are used by successful language learners, but quite another to prove that LLS were to some extent responsible for learner success. In a review of LLS literature, Oxford (1993) found that the use of appropriate language learning strategies leads to improved proficiency or achievement overall or in specific skill areas (e.g., Chamot & Kupper, 1989; Cohen, 1990; O’Malley & Chamot, 1990; Oxford & Crookall, 1989; Cohen, 1990; Wenden & Rubin, 1987). She claims that this is the most general finding in LLS studies.

The focus of this section is on ex post facto studies (see the previous chapter for the section on the methods by which LLS selection and use are measured against

learning outcomes). The findings of interventionist studies will be examined in the following chapter on LLS instruction.

Lalonde (1998) examined six correlational studies (correlating LLS use with learner success). Several of these studies are frequently mentioned in other literature reviews; in particular, the Naiman et al. study (1978), the Bialystok study (1981), and the Politzer & McGroarty study (1985) have received a fair amount of attention. Despite the fact that these studies used different taxonomies and used different assessment instrument that suffer certain weaknesses (see Chapter Four for the weaknesses with these instruments), she was able to arrive at the following positive conclusions:

1. LLS which involved authentic target language use such as reading, going to movies, listening to the radio, watching TV, and speaking with native speakers had the greatest effect on the oral communication performance in several studies (Bialystok, 1981; Huang & van Naerssen, 1987; Naiman et al., 1978; Politzer & McGroarty, 1985; Ramirez, 1986).
2. Naturalistic or functional practice correlated significantly with achievement on listening tasks (Bialystok, 1981).
3. Asking for clarification, asking for verification and correcting others' errors silently were found to correlate significantly with aural comprehension (Poltizer & McGroarty, 1985).
4. The following LLS were found to correlate significantly with L2 reading achievement: inferencing, asking for clarification, asking for explanation, asking

for repetition, monitoring (oneself and others), as well as certain functional practice LLS (Bialystok, 1981; Ramirez, 1986).

5. Success on standardized tests correlated significantly with several LLS: making vocabulary lists, spending time on material missed in class (Politzer & McGroarty, 1985), asking for verification, inferencing, using mnemonic techniques, searching for patterns in L2 (Ramirez, 1986), and functional practice (Bialystok, 1981).

It is also important to note that correlational LLS research still gives priority to studying more successful or advanced learners as a research subjects, but not to the same extent as descriptive research on the good language learner. In fact, it is often useful to investigate a mixed group of students with a range of proficiency scores to form a clearer sense of the differences between more and less successful language learners (e.g., Huang & van Naerssen, 1987; Ramirez, 1986).

### **Counter-evidence to and Criticisms of the Findings of the Correlational Studies**

As with the section on the problems with the good language learner studies, qualifications to the findings will be discussed in this section, along with counter-evidence and criticisms. At this time, I should also make clear that this section addresses the problems with LLS ex post facto studies and does not address the problems with LLS instruction, per se.

Lalonde (1998) concludes in her literature review of correlational studies that the common thread linking the different tasks in the six studies was authentic language use (functional practice). It appears that by “authentic language use,”

Lalonde means “learning by doing,” in which case I believe she has come to the right conclusion. We should be careful, however, not to equate authentic language use with “learning from authentic context.” Despite the conventional view by teachers that learning from context is a method that will lead to positive learning results, semantic-context LLS have not, in fact, been proven by research to aid the learning process (Pressley, Levin, & McDaniel, 1987) and in think-aloud procedures, advanced students of Italian remarkably did not mention any use of semantic-context LLS in learning new vocabulary (Lawson & Hogben, 1996). (In a related study, however, Gu and Johnson (1996) claim that decontextualized vocabulary learning may be of only limited value.) These findings are important in this discussion on authentic language use; but more generally, they are important in that they show an example of an LLS that is traditionally viewed as helpful to the language learning process, but which, upon investigation, does not yet prove itself to be so.

Not all LLS have been found to contribute to learning. Using certain LLS in certain contexts seems to produce the same learner outcomes as using no LLS at all. Two studies that have not found positive correlations between LLS and learner success are Cohen and Apeh (1980) (for a subgroup of students) and Lalonde (1998). In fact, there are LLS that are negative predictors of learning success, such as visual repetition of new words (e.g., Gu & Johnson, 1996). It is important to note that LLS can not only be relatively less effective than other LLS in certain contexts, but that LLS can actually do harm to the learning experience. It would be better not to use any LLS at all than to use these LLS. In the worst scenarios, LLS which were

predicted to have a positive effect on language learning either had no significant effect or were negatively related to learning outcomes (Padron & Waxman, 1988).

Another problem is that even though correlational studies have found positive associations between LLS and proficiency/achievement measures, Politzer (1983) suggests that the positive finding might not have been due to a real correlation between the two, but due to third factor mediation. As mentioned earlier, there are many factors that account for SLA. That an LLS was used during successful language learning does not necessarily mean that the LLS caused or contributed to the success. The association may be coincidental, not causal, and the real cause of the learning success may have resulted from other factors, including other LLS which escaped detection or which were not the focal LLS of that particular study. Gu (1996) notes that no study so far has tried to control extraneous variables by statistically partialing them out. As we will see in the section on factors that affect LLS use and SLA, this would be no easy task for the LLS researcher, given the number and differences in influence of these factors.

The vast majority of correlational LLS studies have treated single LLS in isolation against LLS achievement. However, a number of studies have shown that learners tend to use a combination of LLS in the language learning process (e.g., Ahmed, 1989; Gu, 1994; Sanaou, 1995; Gu & Johnson, 1996). Future studies will have to take this into account.

Correlational studies are in part based on some sort of proficiency score (e.g., the score off a standardized test) or proficiency rating (e.g., the year of study of a language at the college level). It is this proficiency assessment that is used to



categorize the subjects of these studies as being more and less successful L2 learners. Politzer (1983) cautions that the type of proficiency test used can obscure the LLS/outcomes relationships. He suggests that the type of teaching method may obscure the findings, as well.

An important question concerning the validity of LLS correlational studies involves the subjects and their degree of language competence. In the fourth chapter, we saw validity problems with research instruments such as verbal reports. For instance, a student might not have the baseline competence in the L2 to do a think-aloud procedure well in the L2. Another potential validity problem is that the subjects might actually be bilinguals or students trying to recover an L2 that they had been raised with (as is often the case with minority heritage languages). If this is so, these bilinguals or bilingual-like learners could adversely affect a study investigating LLS and language gains. I have not found any LLS study that addresses this concern.

### **Factors that Affect SLA and LLS Selection and Use**

Are we sure that it is LLS and not other factors that account for the learning success or learning failure found in LLS correlational studies? This is one of the fundamental questions that any LLS researcher must ask. As mentioned earlier, Gu (1996) noticed that no LLS effectiveness studies have tried to control for extraneous variables. This point should be duly noted, because there are various factors that directly or indirectly affect SLA and affect the selection and use of LLS by a language learner.

Table 5.1 is an attempt at a comprehensive list of the factors that affect SLA. No attempt was made to list the factors in order of importance in SLA. As one can see from this list, LLS are themselves just one of many factors that affect SLA. My contention, as well as the contention of many others, is that LLS are a very influential factor and one over which the learner has some degree of control. Overall, the ex post facto correlational studies—those which looked for a relationship between LLS selection and use and learning outcomes and in which there were no attempt at LLS instruction—show that there is a significant relationship between LLS selection and use and learning outcomes.

Table 5.2 is a list of factors that affect the selection and use of LLS. The factors included in this list are ones that have been examined in LLS studies. Of primary interest to this essay is the factor of proficiency level. Furthermore, since this essay is concerned largely with LLS and advanced level learners, the proficiency level of the subjects is included.

Most research that investigates factors that affect LLS selection and use attempts to isolate a single factor. Researchers, however, are aware that these factors work on LLS concurrently and in combination. Though other studies have investigated the relationships between factors that affect LLS, the Gardner, Tremblay, and Masgoret study (1997) is the first study to examine a number of factors together in the same sample of L2 learners. As Gardner et al. point out, whenever individual difference measures are involved in LLS research, there is always the question of how one might account for the relationships between them. Using causal modeling to evaluate how well their model accounts for the relationships attained, they found that

an extended version of the socio-educational model of SLA is one descriptive model that can be used. In their model, language attitude was seen to cause motivation, motivation cause both self-confidence and LLS, and motivation, language aptitude, and LLS cause language achievement.

Concerning research on factors that affect the selection and use of LLS, I think it would be especially interesting to see future research on the following:

- LLS and the L1s of different learners
- LLS and learners' educational backgrounds
- LLS and the difficulty/complexity of task
- LLS and ESL environments vs. LLS and EFL environments
- LLS and socioeconomic status/affluence

Abraham and Vann (1987) contend that background factors influence a learner's selection and use of LLS by first having a hand in defining that learner's beliefs about and approach to language learning. I agree, but I think that factors not only determine a learner's beliefs, but also plays a role in determining a learner's learning circumstances. For instance, the factor of affluence might affect both one's beliefs (early language education under highly trained language instructors that helps to form one's language learning beliefs about language learning) and circumstances (opportunities to hire tutors, opportunities to travel and live in the L2 culture).

To see the relevance of considering factors that affect LLS selection and use, let's look at notetaking. Given the factors that affect LLS selection and use (e.g., cultural values, educational backgrounds, cognitive styles) of, say, a group of Japanese students and a group of Brazilian students, we might find that higher

proficiency Japanese students use notetaking LLS that resemble the notetaking LLS of lower proficiency Brazilians in terms of type of notetaking, frequency of notetaking, amount of notes taken, etc. We still have much to learn about how the various factors affect LLS selection and use.

According to Green and Oxford (1995), one of the most successful strategy-related models of language learning is that of McIntyre (1994). McIntyre highlights the importance of affective factors and correlates the use of an LLS with task demands, proficiency, aptitude, attitude, motivation, previous success, anxiety, self-confidence, sanctions against LLS use, goals, and criteria for success. In this model, students must be aware of the strategy, must have a reason to use it, and must have a reason not to use it. The learner should be aware that success or failure in the learning task may be due to LLS and/or other factors (McIntyre, 1994).

The prevailing impression given by LLS research is one of uncertainty. No finding, hypothesis, or assumption in the field of LLS studies can confidently be affirmed, with the exception of the notion that more appropriate selection and use distinguishes more successful language learners from less successful ones. Yet this is a statement that tells us almost nothing, given that we are not aware of the criteria of appropriateness for various tasks and for various types of learners.

In the next chapter, we will turn our attention to issues in LLS instruction, keeping in mind what was discussed in this chapter.

## **VI. LLS INTERVENTIONIST STUDIES AND LLS INSTRUCTION**

Are LLS teachable, and if so, to what degree are they teachable? Can all the individuals in a class of students composed of different types of learners benefit from LLS training? Are the potential benefits of studying LLS worth the time and effort required? Are there any negative effects from teaching LLS? These are some of the questions that drive LLS researchers, for the ultimate purpose of doing research on LLS is an applied one. Learning about LLS in and of themselves is not the goal; the goal is to help learners learn.

In large part, the goal of helping the language learner has been viewed in two ways: (1) the lessons learned about the LLS selection and use of successful (and unsuccessful) language learners can be passed on to less successful language learners (e.g., Rubin, 1975; Gu, 1996), or (2) increased understanding of LLS can lead to greater learner autonomy for the less accomplished language learner, who has yet to develop the skills needed for successful independent learning (e.g., Wenden, 1991; Chamot and O'Malley, 1993). The underlying assumption of both of these views is that language learners do not learn LLS automatically. Many language learners do not learn LLS automatically, despite some widely held beliefs to the contrary. For instance, it was long assumed that children automatically begin to use simple memory strategies such as rehearsal or repetition of new words. Pressley and Harris (1990) mention that preschool children have not been found to rehearse when asked to learn lists of new words, though 11 and 12 year olds do use this strategy. Though most adults have automatically learned some learning strategies, certain strategies, such as self-questioning, are not frequently learned automatically. As other LLS researchers

have pointed out, it does seem strange that language teachers expect students to learn information that is presented to them in class yet do not usually teach students how to learn (see Figure 6.1). At least on an intuitive level, then, it seems to make sense that along with language instruction there should be instruction on how to learn a language, largely in the form of LLS instruction. LLS instruction might very well prove to be one of the most important factors that affects a learner's acquisition of a second language.

As we can see from these two views of the goal of LLS research, one of the primary assumptions of LLS research is that it is done for the sake of less successful or lower level learners. I hold that this view is too narrow. Increased knowledge of LLS is something that can be of potentially great benefit to advanced language learners, as well. So far, only a few authors, such as Suzanne Graham (1996) and Wenden (1987), have considered the application of LLS research for suiting the special needs of advanced learners. I support such efforts and propose that LLS research should benefit more successful learners (including advanced learners), as well.

In the following chapter on LLS and advanced language learners, we will discuss how improved understanding and use of LLS might be just what the advanced language learner needs.

### **Findings from LLS Instruction Research**

LLS instruction research has been around for only about twenty years now, and, as Gu (1996) laments, very little empirical research has been done to investigate

the usefulness of LLS instruction. And considering the mixed findings of the research that has been done, it is difficult to come to any solid conclusions about LLS instruction. LLS instruction has not yet proven itself to be as helpful or effective as was hoped. Given the strong proof that the selection and use of LLS has been positively correlated with successful language learning (at least to some degree), it was hoped, and no doubt presumed, that LLS instruction research would demonstrate unequivocally that LLS instruction produces more efficient learning and better outcomes than no LLS training. That is not to say that LLS instruction is simply ineffective. The paradigms, approaches, and methods that have been used so far may have been inadequate for the task. Table 6.2 offers examples of the mixed findings of interventionist studies (studies that attempt to introduce LLS instruction to learners and measure gains from the LLS instruction). To my knowledge, this is the first time that findings of LLS interventionist studies have been sorted into categories.

What we have, essentially, are findings that are so diverse that we can neither confidently promote nor debunk LLS instruction. Even outside of the field of SLA, learning strategy has received mixed or uncomfortable results (Dansereau, 1985). Looking at some of the possible reasons for the success or failure of interventionist studies may give us some valuable insight into this matter.

Concerning the reasons for successful LLS instruction, the obvious reason—or at least the one hoped for by LLS researchers—is that improving a learner's repertoire of usable LLS simply makes that learner a better language learner, and therefore we find positive correlations between the LLS instruction and learning achievement. Likewise, unsuccessful studies simply suffered from poor

methodology, poor circumstances, etc. There could be other reasons that could account for the success of these studies, however:

- Successful interventionist studies were shown to be successful only over the course of a short period of time. The only LLS study that I have run across that has attempted any longitudinal investigation of LLS is the one conducted by Chamot and Kupper (1989), but the longitudinal part of this study was not interventionist, only observational. Since the real goal of LLS instruction is to improve the learners' use of LLS over time and truly incorporate better LLS and better use into the learning process—not just improve LLS use within the limited confines of, say, an eight-week course—the “success” of these studies is limited and might not contribute to long-term success, as hoped.
- Success with the studies was only found in the classroom (in a controlled setting); no proof was given that these LLS were being used outside of the classroom setting. If learner autonomy is a goal of LLS instruction, researchers would do well to show success of LLS instruction in applications outside of the classroom.

Concerning the reasons for unsuccessful LLS instruction, the obvious reason would be that LLS instruction simply does not help language learners—LLS are either not teachable or they are an insignificant factor in SLA. Oxford (1993, p. 181), however, gives the following possible reasons why some of these interventionist studies have failed:

- too short a period for L2 strategy training
- a disproportionate ease or difficulty of the training task



- an overemphasis on the more purely intellectual aspects of language learning
- a lack of attention to affective and social strategies that are potentially important to language learning
- a lack of integration of the training into normal language class work and the perceived irrelevance of the training
- an inadequate pre-training assessment of learners' current strategy use, learning styles, and needs

Here are some other possible reasons for the inconclusive or negative findings of interventionist studies:

- There might have been inadequate teaching methodology. For instance, an LLS interventionist study may have focused on the use of a single LLS at the expense of the more important goal of effectively managing one's repertoire of LLS (Chamot & Rubin, 1994).
- Students in the control groups may have been using effective LLS even though in the interventionist study this group of students were not being taught LLS (Cohen, 1998). In the future, control group students should be asked about the sorts of LLS that they used during the period of the study.
- There might have been circumstantial difficulties (e.g., lack of consistent student attendance in class).
- There might have been attitudinal difficulties (lack of belief in the effectiveness of LLS from teachers, students, parents, or administrators).

- There might have been motivational difficulties (lack of motivation or interest in language learning by the subjects and teachers).
- There might have been confounding effects by other factors that affect SLA and the selection and use of LLS (e.g., the proficiency level of the subjects).
- The LLS researchers may have attempted to instruct certain LLS that were not especially helpful to the learning tasks in these studies.
- The very measures of “success” may have been incorrect (such that they adversely affected the findings).

Keep in mind that the effectiveness of language instruction itself has been called into question, though studies such as Gass’ (1982) suggest that instruction is indeed of benefit to the language learner.

Concerning Oxford’s first point about the LLS research occurring in too short a period, I find three ways to view this. First, the development of the use of an LLS as a new skill may take a fairly long time. Despite the amount of time that it may take to learn a new LLS, the outcomes might be worth the costs in time and effort to learn it. Most interventionist studies are short-term projects, so there might not be sufficient time to adopt the LLS to an adequate level of skill, given the time limitations of the interventionist study.

Second, there are two things being taught during LLS interventionist studies: one is the LLS, and the other is the L2. This can be true even in studies in which LLS are embedded in the syllabus. In such cases, even though it may seem to the students that only the L2 is being taught, extra time might be spent on certain tasks—time that would not otherwise be spent on the language task—for the sake of improving the

students' use of certain LLS. If the teaching of LLS takes up much of the classroom time, this means much less time is available for the treatment group to study the language itself. The control group would, therefore, have more time to study the language. Though teaching how to learn the L2 through LLS instruction may be beneficial in the long run for the learners, the research finding of a short-term study might show that the control group does as well as (or even outperforms) the treatment group.

Third, the students might initially resist the adoption of new LLS, because they are unfamiliar or "unnatural" for them. The LLS might eventually be adopted by the students and prove to be quite advantageous, but in a short-term study, this resistance could negatively affect the findings.

An interesting line of study in LLS interventionist research is the investigation of learners' and teachers' perceptions of LLS instruction. Here again we have mixed results. Chamot (1993) found that the majority of the beginning students in two LLS interventionist studies believed that LLS instruction had a positive effect on their learning. Wenden (1987), on the other hand, found that the majority of the students, who were advanced learners, did not have a positive view of LLS instruction. We could point to the teacher's teaching style, the students' motivation, and other possible causes of these results. Relating to this essay, however, it would be particularly interesting to learn if the different findings were due to the proficiency levels of these students.

Teachers' perceptions of LLS instruction play a significant role in the success or failure of LLS instruction. In LLS interventionist studies conducted by

Georgetown University's Language Research Projects, Chamot and O'Malley (1993) found that both teachers and students perceived LLS instruction as more of an optional activity than an integral part of their course work.

Further research on student and teacher perceptions of LLS is warranted, though of equal or greater importance are the studies that demonstrate a causal relationship between LLS instruction and L2 learning gains. Showing that students and teachers believe LLS instruction is beneficial is one thing; proving that it actually is beneficial is another. Even if it is beneficial, is it beneficial enough to merit the cost of time, effort, and resources required of adequate LLS instruction?

Gaps and weak areas in LLS research will need to be resolved through future research. For instance, no interventionist study has actually shown that the LLS that were taught have actually been included in the learners' repertoire of LLS. More recommendations for future research will be addressed in the concluding chapter.

### **Proficiency Level and LLS Instruction**

Of particular interest to this essay is the relationship of proficiency levels and LLS instruction. In a study by Cohen and Aphek (1980), beginning, intermediate, and advanced level learners alike seemed to profit from the instruction of association strategies. However, LLS instruction might be more effective for lower level students than for intermediate or high level students. This was the finding of a study by Kern (1989). Simply because LLS instruction may be more effective for lower level students, this does not mean that it is ineffective for higher level students. Advanced students may, in fact, have much to gain from LLS instruction, though gains may

come as fine-tuning of their LLS repertoire, and therefore this readjustment of their LLS repertoire might not be easily detectable. Also, in measurements of effectiveness of language instruction, one needs to remember that within any given span of instruction, the lower level student is more likely to progress by leaps and bounds, whereas the advanced level student is “filling the gaps” of an otherwise well-formed L2 system. Also, the advanced level learner may be suffering from the effects of fossilization of the interlanguage much more than lower level students, and perhaps LLS instruction will prove to be a most effective means of overcoming fossilization. This idea will be pursued further in the following chapter. These reasons could account for why this LLS research finds (perhaps erroneously) that LLS instruction is more effective for lower level learners than for higher level learners.

Also concerning LLS and language proficiency level, it should be noted that longitudinal interventionist studies, though on the surface seeming to be a worthy pursuit, might be disadvantageous for the language learner. This is because LLS selection and use seem to change over time as a language learner progresses. So for example, let’s say that a longitudinal interventionist study tries to incorporate the LLS of “learning vocabulary with visual aids” into a language course and tries to chart the inculcation of this LLS into the students’ LLS repertoire over the course of several years. During Year 1 of the study, the students might be at a stage or proficiency level which merits the instruction of this LLS, and the increased use of this LLS might be quite advantageous to the language learning process. However, as time goes on and the students reach higher stages or proficiency levels, it might be better for

them to start to abandon this once-important LLS for LLS which are better suited for vocabulary building for more advanced language learners. The continued teaching of learning vocabulary with visual aids might actually confound the progression of language learning. On the other hand, if the students start to abandon this LLS for ones more suited to their level, the findings by Year 3 or Year 4 might be considered “disappointing” (because the subjects started to “lose” this instructed LLS), even though the students are successfully developing as LLS users.

Because of the proficiency level of its subjects, one interventionist study will be examined in some detail. Wenden (1987) sought to incorporate an LLS awareness program as part of a seven-week intensive English program during a summer at Columbia University’s language institute (American Language Program). Two groups of “very advanced students of various cultural backgrounds” (p. 164) were to spend two hours a week on learning LLS. That left 14 hours for classroom language study and four hours for language laboratory work for these 23 participants. The general objective of the LLS project was to refine and expand student awareness of various aspects of their language learning experience, such as the difficulties they encountered, the LLS they used to deal with them, and their views on the nature of language and language learning. The materials consisted of readings adapted from writings on language learning, on LLS, and on student accounts of language learning. Mini-lectures were held, and training tasks included 1) comprehension exercises, 2) class discussions based on the readings or listenings, 3) out of class practice tasks, and 4) focused diary writing. The purpose of the tasks was to help students become aware of aspects of their own language learning and the language learning of others.

The training was meant to increase metacognitive awareness about language learning and to learn about skills that help facilitate language learning, with more of an intention of having this knowledge applied outside of the classroom rather than suit the specific language lesson needs that they faced during that particular summer English program.

The LLS instruction of these very advanced level students was unsuccessful. One of the two groups was so resistant to learner training that the LLS sessions were discontinued after the first three weeks. Seven students from that group continued to come to what remained of the discussion class, though one of the reasons that they continued coming was to practice English fluency in a small group. (Practicing English fluency in small groups was probably an LLS found effective by these students.) It seems that learner training was not considered relevant in its own right. At the end of the project, a questionnaire was distributed that evaluated the effectiveness of the project and the attitudes of the students. Concerning attitude, less than 50% of the respondents agreed that the tasks that constituted the training had been useful. When asked why, only five students gave reasons for this. Seven of the respondents indicated that they had changed their approach somewhat, and five indicated that they had learned something that they did not already know (Wenden, 1987).

It is unfortunate that this study is not discussed in greater detail by Wenden, who has published the article in the educational journal System and as a chapter in one of her own books. I wonder what the exact reasons were for the failure of this interventionist study. If it was student resistant, as the researcher suggests, then what

caused this resistance? Was it resistance to the introduction of unfamiliar LLS, to the teaching method of the course, to what was perceived as an uninteresting discussion topic (LLS) in class time that was allocated to the development of fluency? Perhaps it was not resistance at all. Perhaps circumstances within or outside of the classroom led to failure of this project. Though this project is important to this essay because it is an interventionist study with advanced students that failed, it would have been more useful if we could determine the reasons for its failure.

In another interventionist study that investigated the relationship between proficiency level and LLS selection and use, O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo (1985a) noticed some differences between beginning and intermediate level students. Though this study did not involve advanced learners, the findings from this study are insightful and may apply to advanced learners. The beginning students reported greater use of LLS than intermediate students. What might account for this is that the beginners were interviewed in their L1, while the intermediate students were interviewed in the L2. Therefore, the beginners may have been able to express themselves more fully. Both beginners and intermediate students reported that they use many more cognitive LLS than metacognitive LLS: twice as many cognitive than metacognitive LLS for the intermediate students (34% of their LLS repertoire) and three times as many cognitive than metacognitive LLS for the beginners (24% of their LLS repertoire). The intermediate students reported that they use more metacognitive LLS than the beginners. Perhaps for advanced students, metacognitive LLS figure prominently in their LLS repertoire.



### **Points for and against LLS Instruction**

For any teacher deciding whether to not to include LLS instruction along with language instruction, there is no easy answer. LLS instruction commends itself in certain respects, yet there may be serious disadvantages to the adoption of LLS curriculum. The following are potential points **in favor of** LLS instruction:

- LLS instruction may prove to be a significant factor in a learner's acquisition of a second language. LLS are one of the many factors that affect SLA, but it is one of the few that seems to be alterable and controllable by the learner. Furthermore, evidence suggests that appropriate LLS selection and use is a deciding factor in successful language learning. LLS may, in fact, outweigh the effects of many or most of the other factors that effect SLA.
- LLS instruction has been shown to be effective in some studies (see Table 6.2).
- LLS instruction can have a positive influence on students by altering their beliefs about themselves. LLS instruction can make students aware that failures they have had along the course of learning an L2 can be attributed to inappropriate LLS, not to lack of ability or laziness (Borkowski, Johnston, & Reid, 1986).
- Studies, such as the one by Cohen, Weaver, and Li (1998), indicate that raising learners' level of awareness about LLS has a positive effect on student outcomes.

The following are potential points **against** LLS instruction (as it has been done until now). What I am trying to show here is that LLS instruction, which may very well be a worthy pursuit, is riddled with points against it. Many of these points may suggest that conventional LLS instructional paradigms, approaches, and methods are leading us down the wrong path, not that LLS instruction in itself is flawed:

- It is questionable whether LLS instruction leads to transferable and effective use of a new LLS beyond the tasks through which the new LLS was taught and practiced. As Bialystok (1985) points out, LLS interventionist studies have only been shown to alter student performance under specific circumstances.
- Some LLS are negatively correlated with learning outcomes (e.g., Gu & Johnson, 1996). Instruction of these LLS may actually have a negative effect on the language learning process.
- It may be detrimental for teachers to teach LLS that are incongruous with learners' usual experience. Bialystok (1985), invoking the principles of Piaget (1929) and Vygotsky (1962), argues that learners are limited in their ability to incorporate forms of thought or ideas that are substantially different from their present experience. It is important to note that LLS instruction typically attempts to teach LLS that are unfamiliar (to some degree) to learners. The concern here is that certain LLS may be incompatible with or inappropriate for the learners receiving LLS instruction, given their present point in their language learning development.
- Lower level students may not have the L2 language skills in place to receive effective LLS instruction in the L2. When the teacher is not a proficient speaker of the students' L1—and many EFL/ESL teachers fall into this category—LLS instruction is no easy feat. This problem is compounded in multilingual classes.
- In multilingual classes, LLS that might be well-received and appreciated by some students might cause frustration in other, due to differences in their L1s, their cultural backgrounds, etc.

- Some of the LLS that teachers assume to be beneficial to language learning have not actually been proven as beneficial. Take the example of semantic-context LLS (learning the meaning of words in context). A common teacher belief is that learning new words in context assists the learning process. Pressley and Harris (1990), however, claim that over the preceding 15 years, there has been no proof that instruction in learning new vocabulary through semantic-context LLS produces better learning than having no LLS instruction. Instruction of certain LLS may very well be a waste of time, effort, and resources.
- LLS instruction may at times complicate or confound the learning process because it violates acquisition order. Many SLA researchers are convinced that there is a staged sequence of L2 development and that no attempt to learn aspects of the L2 before one is ready can lead to effective learning. See Larsen-Freeman and Long (1991) for a discussion on acquisition order in SLA.
- A number of studies have shown that students resisted learning LLS (e.g., O'Malley, 1987; Sutter, 1989). The frustration that these students feel could lead to a loss in motivation in studying the L2. Of particular interest to this paper is a study by Chamot and O'Malley (1993). Teachers found that the students who were more effective language learners already had in their LLS repertoire the LLS that were being taught, and became impatient with what they perceived as an excessive amount of time on explicit LLS instruction. This implies that it may be the more advanced learners in a class who typically benefit the least from LLS instruction.

- Even if the students are otherwise willing to learn LLS, the teachers might show resistance to teaching LLS within their classes, perhaps seeing LLS instruction as an optional activity more suited for extracurricular study (Chamot & O'Malley, 1993).
- An insensitivity to factors that affect LLS selection and use and to factors other than LLS that affect SLA can result in ineffective LLS instruction or negative effects on language learning (e.g., Entwistle, 1981). Given the number of these factors, becoming aware of all these factors for each student would be a monumental task.
- Our assumptions about the factors that affect LLS sometimes prove to be wrong. For example, consider the findings of Gu and Johnson (1996). Concerning the factor of cultural or educational background, they found that certain Asians do not use memorization LLS to the extent that they have been presumed to. A teacher working under false assumptions about these Asian learners might make decisions about LLS curriculum that are uncalled for.
- What may be a helpful LLS for some learners may be detrimental to others. For instance, the LLS of cooperating with a partner might help in the learning process of some, but for others, it might only lead a reliance on one's partner to accomplish the language learning task.
- Certain otherwise beneficial LLS might be viewed negatively in certain contexts. For instance, the LLS of cooperating with a partner might be viewed as cheating, depending on the context. There may be negative connotations to certain LLS.

- It is not clear how applicable the findings of LLS interventionist studies are outside of mainstream school and university settings. If one buys into the idea that the goal of LLS instruction is to help develop learner autonomy (e.g., Wenden, 1991), then effective use of newly learned LLS outside of the classroom is crucial.
- There may be extra costs in terms of time, effort (for teacher training, as well as learner training), and resources which, when viewed in terms input/outcome ratios, outweigh the potential benefits of the LLS instruction.
- “Learner training” or “learning to learn” have the implication that students are inadequate at learning. LLS instruction may be viewed as patronizing or irritating by adult learners (Rees-Miller, 1993).
- It is difficult to create compatibility between teacher’s beliefs about how to learn language and students’ beliefs. This is a real sticking point for LLS instruction, because the teacher is not just teaching subject matter (the foreign language) but teaching students how to learn, as well. Problems with compatibility can lead to continued clandestine use of techniques not supported by the teacher (Porte, 1988) or withdrawal from the course (Bailey, 1983). Teachers may also prove guilty of inadvertent reinforcement of ineffective and non-transferable LLS (Dansereau, 1978).
- The introduction of innovations (in this case, new LLS) by researchers and not by teachers themselves may not lead to the desired results (i.e., adoption of new LLS into the students’ LLS repertoire, appropriate selection and use of LLS, etc.) (McDonough, 1995).

Again, despite the greater number of points that stand against LLS instruction, this by no means suggests that LLS instruction itself is an unworthy pursuit. The weight of the points in favor of LLS instruction may be such that LLS instruction merits a considerable amount of classroom time. Also, the points that stand against LLS instruction may be due to an erroneous perception of how to teach LLS.

### **Issues in LLS Instruction**

#### **Language proficiency**

At what level of language proficiency should LLS instruction take place? For those who accept the worth of LLS instruction, this becomes an important issue. Teaching LLS to beginning level students can be a paradox: these students are typically seen as the ones most in need of LLS instruction, yet for practical reasons—the teacher might not be proficient in the students' L1 and they are very limited in what they can comprehend in the L2—effective LLS instruction is difficult if not impossible. Wenden, in a personal communication to O'Malley & Chamot (1990), recommended that priority be given to teaching beginning level students the language of metacognition in order to enable them to receive effective LLS instruction in the L2.

On the other hand, the restrictions that we find with teaching LLS to lower students do not apply to advanced or very advanced students, but these students have not typically been viewed as being in need of LLS instruction. The reasoning is that they are already successful language learners, the models of successful behavior for

less successful learners. However, I believe that the time has come for LLS research to aid advanced and very advanced language learners in their language development.

#### Separate vs. integrated instruction

Though this issue does not figure largely into the concerns of LLS instruction and advanced language learners per se, it is a basic issue in LLS instruction and determines the format of any LLS instructional program. The unresolved debate is over whether LLS instruction is best done as training sessions separate from the language course or as an integrated part of the language course. The argument for separate LLS instruction goes that students will learn better if they are allowed to focus on the development of strategic skills, rather than deal with learning content at the same time that they are learning LLS (Jones, Palincsar, Ogle, & Carr, 1987). The argument for integrated instruction goes that learning LLS in context is more effective for learners (Wenden, 1987) and that practicing LLS in language learning tasks facilitates the transfer of LLS to similar tasks encountered in other classes (Campion & Armbruster, 1985). An alternative to implementing one type of instruction over another is to include both types in a language learning curriculum (Weinstein, 1982; Weinstein & Underwood, 1985).

#### Direct vs. embedded instruction

Another unresolved issue in LLS instruction is whether to teach LLS in direct or embedded instruction. In direct instruction, students are informed of the value and purpose of the LLS training. In embedded instruction, LLS are taught under the guise of language tasks that elicit the use of certain LLS, and students are not informed of the value and purpose of the LLS training. The argument for direct instruction goes

that it helps the language learner to develop independent LLS and become more autonomous learners (Wenden, 1987). Also, many researchers claim that conscious awareness of LLS can lead to improved LLS selection and use. The argument for embedded research goes that little teacher training is necessary; teachers can just engage students in language activities in specially designed textbooks with embedded LLS instruction (Jones, 1983). Also, embedded LLS instruction can perhaps avoid some of the negative attitudinal pitfalls encountered in some interventionist studies. As with the separate vs. integrated debate, a possible solution to this problem is to incorporate aspects of both direct and embedded instruction into a language learning curriculum (Derry & Murphy, 1986; Brown, Armbruster, & Baker, 1986; Palincsar & Brown, 1986).

Like the separate vs. integrated debate, this is a concern that is not too specifically related to instruction of advanced learners but that certainly has significant bearing on LLS instruction in general.

#### LLS instruction guidelines and programs

There is no single view of LLS instruction. Three types of strategy training exist: awareness training, one-time strategy training (over the course of only a few sessions), and long-term strategy training (Oxford, 1990). Moreover, LLS instruction can take various forms: general study skills courses, peer tutoring, research-oriented training, videotaped mini-courses, awareness training, LLS workshops, insertion of LLS into language textbooks, an integration of LLS instruction into foreign/second language courses (Cohen, 1998). In the following chapter, an alternative form of LLS



development suggested by Donato and McCormick (1994) will be promoted for advanced language learners.

Stemming from the various stances on the issues involved in LLS instruction and on other factors, different guidelines or teaching programs for LLS instruction have been created. Let's now look at two of the major sets of guidelines for LLS instruction with an eye to finding some similarities or interesting differences.

Chamot and O'Malley have done considerable work on designing LLS instruction programs. There are **three components** in the curriculum design of their Cognitive Academic Language Learning Approach (CALLA):

1. The selection of topics from major content subjects for use in the L2 course
2. The development of academic language skills
3. The explicit instruction of LLS for both content and language acquisition.

The CALLA lesson is organized into **five stages**:

1. Preparation: The teacher explicitly describes the LLS that will be studied in that days class.
2. Presentation: The teacher models the strategic behavior, usually by thinking aloud while working through a sample language task.
3. Practice: Students practice the LLS, often as a collaborative effort.
4. Evaluation: Students assess how well they have been able to use the LLS.
5. Expansion: The teacher encourages the application of the LLS to new tasks.

These researchers claim successful application of CALLA in both ESL and EFL setting (Chamot & O'Malley, 1993), though it seems that most if not all of the applications have been with lower level students.

Oxford (1990, p. 204), a long-time proponent of LLS instruction, has developed an eight-step set of guidelines for such instruction:

1. Determine the learners' needs and the time available.
2. Select strategies well.
3. Consider integration of strategy training.
4. Consider motivational issues.
5. Prepare materials and activities.
6. Conduct "completely informed training."
7. Evaluate the strategy training.
8. Revise the strategy training.

By "completely informed training," Oxford means that LLS instruction should be direct, informing the students of the purposes and benefits of the LLS instruction.

Other authors have compiled guidelines for general strategy instruction (e.g., Jones, Palinscar, Ogle, and Carr, 1987; Dansereau, 1985) or LLS instruction (e.g., Wenden, 1991; Pressley & Harris, 1990), but the ones by Oxford (1990) and Chamot and O'Malley (1993) are probably the best known of the LLS instruction guidelines. That is not to say that they are widely used. My sense is that courses or sessions that teach LLS to students are conducted mostly by (1) researchers who design their own LLS instruction methods for LLS research, (2) teachers who design their own LLS instruction methods, or (3) teachers who use pre-designed textbooks that help develop LLS skills.

LLS researchers tend to favor direct, integrated training; this seems to be the general trend in LLS instruction. They also tend to find evaluation of LLS instruction

necessary. Their recommendations seem to evolve as much from findings of research as from their own beliefs about pedagogy. This is not meant as a criticism but as a qualification. Their intuitions as teachers, informed from years of experience investigating LLS, may help lead fellow teachers to successful LLS instruction. Strong evidence for this, however, remains to be seen.

#### The selection of LLS for instruction

Arguably the greatest obstacle that any instructional program of LLS has to overcome is the selection of the LLS to be studied. How does a teacher go about selecting the LLS for instruction? This depends on several factors:

- The teachability of the LLS (given a student's stage of L2 acquisition and the nature of the LLS)
- The ease with which the LLS can be taught
- The ease with which the LLS can be learned
- The attitudes of the students and their beliefs about language learning
- The motivation of the students
- The proficiency level of the students
- The cultural background, gender, cognitive style, and other characteristics of the students
- The various language needs of the students
- The purpose of the language course
- The length of the language course
- The time that can be allotted to LLS instruction

Even with this information in hand, it is not clear how the teacher—or researcher, for that matter—would actually go about selecting the LLS for instruction, though. But saying that the teacher was able to select the most suitable LLS, Oxford (1990) suggests that the teacher should decide between training with a broad focus or with a narrow focus. Broad-focused training involves the instruction of LLS combinations; narrow-focused training involves the instruction of one or two LLS rather than a combined set. There are advantages to both, but training with a broad focus is predicted to produce better results in the long run. Oxford also notes that LLS instruction could take the form of a combination of broad- and narrow-focused training.

#### The role of learners and teachers

Emerging from the prevalent ideas about LLS instruction come revised images of L2 learners and L2 teachers. LLS learners are necessarily seen as active participants in the learning process, since they are in training to become active manipulators of their LLS repertoire. Typically, LLS students must become self-driven and self-regulated learners, especially in instructional programs in which the goal is to increase learner autonomy (e.g., Wenden, 1991). LLS teachers have even more roles to fulfill. Cohen (1998) sees the LLS teacher as diagnostician, learner trainer, coach, language learner, researcher, and coordinator.

#### Conclusion

As a final note on LLS instruction, despite the different approaches, it is clear that this sort of instruction must accomplish at least two things: (1) develop the LLS repertoires of students (which may mean introducing unfamiliar LLS, unfamiliar

combinations of LLS, or unfamiliar uses of familiar LLS) and (2) teach how to select and use LLS appropriately to suit the learner and the task, for learning about LLS alone will not lead to improved language learning. It would also be fair to say that LLS instruction should take attitudinal and other concerns into account and work to ensure that these factors do not hamper but help the learning process. It is not currently known whether teaching students how to evaluate their LLS selection and use is a prerequisite of successful LLS instruction, but it would be no surprise if this were eventually found to be the case.

In the next chapter on LLS and advanced language learners, we will explore the special needs and circumstances of advanced language learners. We will need to bear in mind the material covered in this chapter when we explore an intriguing alternative paradigm and approach to LLS instruction offered by Donato and McCormick (1994), an approach that may be very well suited to meeting the needs of advanced language learners.

## VII. LLS AND ADVANCED LANGUAGE LEARNERS

As was mentioned in the introduction, the purpose of this essay is to examine the research done on LLS and LLS instruction, especially as it pertains to advanced level adult language learners of a second or foreign language. Research has been done on advanced adult language learners, but this research has, for the most part, been descriptive rather than interventionist. With the exception of only a few studies (e.g., Wenden, 1987), interventionist LLS studies have applied the lessons learned from the research on successful language learners exclusively on students below the advanced level. It is my contention that the findings of LLS research are of potential benefit to advanced level students, as well.

In this chapter, we will examine the problems with defining “advanced language learners,” common characteristics of advanced language learners, and an alternative to the more popular forms of LLS instruction—an LLS development program that may prove especially suitable for these learners.

### **Problems with Definitions**

One of the problems with research on LLS and advanced language learners is the lack of clarity concerning what is meant by “advanced” or “highly proficient.” Studies on the good language learner have used such terms; however, the researchers admitted that the learners in their studies were not deemed “advanced” or “highly proficient” by means of standardized test scores that measured their proficiency level, but by their grade level of study, the years they have studied the L2, or other indicators of proficiency. In fact, in the Naiman et al. (1978) study, interviewees are

deemed “highly proficient” based on intuitive assessment, the interviewees being personal acquaintances of the interviewers or strangers who were recommended to the interviewers as highly proficient L2 speakers. In the Rubin (1975) study, the proficiency level(s) of the good language learners were not made clear at all.

There are various standardized tests that measure proficiency, though some of these do not attempt to label students as “beginner,” “intermediates,” or “advanced students.” Instead, they provide test scores of different language skills (e.g., listening scores, reading scores, vocabulary scores), and this allows those who would make use of these scores to categorize student more or less as they want. A problem with standardize tests is that they are artificial measures of competence. That is, they do not attempt to observe language performance in natural language-use settings, but rather use testing devices that supposedly relate answers given by students on the test to their competence level.

There are also various rating scales that can be used to rank students according to proficiency. One such system is the Oral Proficiency Rating Scales offered by the American Council on the Teaching of Foreign Languages (ACTFL). This system defines “advanced students” as “able to satisfy routine social demands and limited work requirements.” Above this rating are “advanced plus,” “superior” (which is broken down into four subcategories), and “native.” For the sake of this essay, however, such higher level headings will all be subsumed under the rank of “advanced.”

I see two problems with most rating scales. First, they usually are unclear about whether they are attempting to describe stages of acquisition or levels of proficiency.

Stages of acquisition refer to the developmental sequence of stages that an L2 learners progresses through in the learning of that L2 (see discussion in Larsen-Freeman & Long, 1991). All learners go through these stages, all stages are mandatory, and stages cannot be bypassed. It would be fair to refer to someone as being in an advanced stage of L2 development after they move beyond the limitations of an intermediate stage. Learners who have moved to an advanced stage are now in a state of readiness to learn new information about the L2, information that they were not equipped to learn while they were in the previous stage. Proficiency level, on the other hand, may refer to a more linear progression on a continuum, and the delineation between levels, as opposed to stages, is arbitrary, and depends on the needs or interests of the people doing the labeling. Though proficiency itself may be measured on a continuum, a move from one proficiency level to another may signal a real shift in language learning focus. For instance, a student who has finished intermediate level work may have focused on learning what Cummins (1979, 1980, 1984 as cited in Graham, 1997) refers to as Basic Interpersonal and Communicative Skills (BICS), but be expected to shift focus to Cognitive/Academic Language Proficiency (CALP) now that he/she is an “advanced” student.

Second, most rating scales give a global assessment of language proficiency, treating language as a single skill. Although there may be some value to this, it gives an inaccurate picture of what competence in a second language is like. Language is composed of **different skills and knowledge**, and proficiency can be measured along these different but interrelated areas:

- Speaking skills
- Listening skills



- Reading skills
- Writing skills
- Usable knowledge of vocabulary
- Grammatical competence
- Strategic competence
- Discourse competence
- Sociolinguistic competence
- Pronunciation and intonation skills
- Pragmatics skills (e.g., gesture skills)

Moreover, **language knowledge and skill can be assessed under various criteria,**

as seen in *Guidelines for Written French at A Level* (1986 as cited in Graham, 1997):

- Range of lexical resources
- Accuracy with which the available resources are handled
- Variety of syntactic structures
- Precision of use of syntactic structures
- Sensitivity of idiom and style
- Appropriateness of language to content
- Achievement of communication

What further compounds this problem is that “advanced” is sometimes equated with “successful,” but in Chapter Five, we saw that these are not the same. “Successful” language learners can be efficient or skilled learners who have not yet reached an advanced level of proficiency, but who successfully use appropriate LLS in their language learning process. This having been said, it is usually fair to say that advanced language learners are successful language learners, as evidenced by their upper end level of L2 attainment. But what qualifies “success”? Speed of acquisition? Thoroughness of acquisition? Constancy of improvement? Ever increasing ability to communicate with L2 speakers? Regular, marked increases on proficiency test scores? This last determiner of “success” is the easiest to deal with in LLS research, and it is often used in interventionist studies that assess language improvement and before-and-after descriptive studies.

### **Characteristics of Advanced Language Learners**

Previously in this essay, we have seen that successful learners (presumably advanced level learners) do not necessarily have more LLS, do not necessarily use LLS more often, and do not necessarily use LLS more actively than less successful learners (presumably lower level learners). Much of what was assumed to be true about “the good language learner” has proven to be inaccurate. Looking at the findings of LLS research, only the weak, almost meaningless blanket statement that successful language learners use LLS “more appropriately” than less successful learners appears to hold true.

In terms of LLS selection and use, it is regrettably difficult to characterize advanced language learners. There are several reasons for this. First, the various types of advanced language learners—differing along the lines of the multitude of factors that affect SLA—are so diverse that few common traits can be found among them. This was an issue that was not given due recognition in the early years of LLS research, and one factor that has gained increasing attention is cultural background. To a large extent, the good language learner studies seemed to be based on the good American learner of foreign language. Though Rubin (1975) interviewed non-Americans along with American students, she did not mention what percentage of the interviewees were non-American. Also, it is not clear who the subjects were in the Naiman et al. (1978) study.

Second, the instruments used to assess LLS selection and use are far from perfect. In Chapter Four, we saw that the LLS researcher can use a number of means,

each with its own faults, to get a sense of what LLS are being used by language learners. The problem is that LLS are not often directly observable. The LLS researcher can ask the students what LLS they use, can try to observe the byproducts of LLS use, can use think-aloud procedures to elicit information about LLS use that the learner is consciously aware of at the time of LLS use. All of these are attempts at making the best of a difficult situation.

Third, LLS research has so far told us little about combinations of LLS or about the sequence of these combinations. This is a major issue, since there is a growing belief that it is the combinations of LLS that make for appropriate LLS use, and learners who have successfully reached advanced levels of proficiency can be generally characterized by appropriate LLS use.

What, then, can we say characterizes advanced language learners, their study habits, and their language needs? Let's consider several characterizations.

We can characterize advanced learners as having more competence in significant areas of the L2 and having more knowledge of the L2 (typically more syntactic knowledge, more pragmatic knowledge, more knowledge of vocabulary, etc.) than lower level students. This is obvious enough, but one implication of this is that advanced learners are more informed guessers than lower level students. Given their greater knowledge of and familiarity with the L2 words, grammar, pronunciation, etc., advanced learners understand more of a passage than their lower level counterparts do, and can therefore devote more attention to guessing the meaning of unfamiliar words. Furthermore, because they understand more of what is going on in the passage itself, advanced learners also derive more contextual

information from the passage than a lower level learner can and their guesses are therefore more informed and more likely to be correct (Hosenfeld, 1979). This sets advanced learners up to be potentially highly efficient language learners.

Advanced learners have a relatively well-developed repertoire of LLS, since they have been working at the language learning process for quite some time in order to reach the advanced level. This characteristic leads to another possible characteristic, one concerning LLS instruction. Because advanced adult learners have succeeded in reaching a high level of proficiency using a certain set of LLS, they may be more resistant than the average lower level learner to LLS instruction (Bialystok, 1985). They may find LLS instruction irritating, patronizing, too familiar, or a waste of time (Rees-Miller, 1993). However, resistance to LLS instruction can also be found among less successful learners. The stubbornness of these less successful learners about their LLS is presumably one of the main reasons that these students do not learn as well as others. As Gu (1996) observes, it is ironic that the learners who may be most in need of LLS instruction or assistance—less successful learners (for Gu) and advanced level learners (in my opinion)—are among those who are most resistant to LLS instruction.

Potential resistance by advanced level learners is an issue that has to be addressed by any teacher who plans to include LLS instruction into a language program. Prior to implementing LLS instruction, the language teacher may want to openly discuss the potential benefits of LLS instruction and why resistance may occur. Another possible solution is to develop an LLS assistance program that offers each learner certain LLS and LLS combinations that are potentially helpful to that

individual learner. This preferable solution will be discussed in more detail in the following section on an LLS development program for advanced learners.

Also on an affective level, teachers and native speakers of the L2 typically have higher expectations of performance from advanced language learners (Graham, 1997). This can result in increased anxiety among advanced learners.

Advanced learners have usually demonstrated effort in their language learning. Effort is one of the key elements of motivation (Gardner, 1985). Lennon (1993)—an author known for his work on advanced language learners—claims that motivation is the single most important factor influencing continuing development in oral proficiency. Motivation and effort can also be seen as related to competitiveness, a characteristic often found among advanced language learners, though not universal. Of course, effort can be seen among lower level students, so effort in itself does not distinguish advanced learners from other learners. However, we can confidently say that effort is found among all advanced learners.

Advanced level students differ in terms of their beliefs about language learning. In the Wenden (1987) study, twenty-five very advanced ESL students were grouped into three categories according to their beliefs about language learning: 1) those who believed in the importance of using the language in natural environments and were therefore more interested in speaking and listening, 2) those who believed in the importance of using the language and therefore stressed grammar and vocabulary, and 3) those who believed that personal factors such as aptitude and feelings about language learning were influential. I am not aware of any attempt by other authors to

categorize advanced students by their language learning beliefs. It would be interesting to know if any one belief dominates among advanced language learners.

Advanced students have problems that derive from the very fact that they are highly proficient. For instance, advanced students have cultivated the typically useful LLS of “guessing meaning from context” to such a degree that they may begin to use the negative LLS of “‘hearing in’ from context.” This means that the students are so influenced by the general context of the passage that they claim to hear items that are in fact absent and use this to make sense of the passage as a whole (Graham, 1997). It should be noted that although Graham claims to have observed the negative LLS of “‘hearing in’ from context,” it is not clear how this LLS was investigated.

Prokop, Fearon, and Rochet (1982) claimed to have observed a shift from attention to details of the learning task in beginning courses to a greater use of the linguistic context and of a more global approach to language learning in advanced courses in Canada. Graham (1997), on the other hand, observed just the opposite in Britain. As mentioned earlier, she noted that beginning and intermediate level courses emphasize BICS (successful communication is valued more than accuracy) and advanced level courses emphasize CALP (accuracy becomes valued). The classroom needs of advanced students can be quite different. Is one learning program better than another? Looking ahead in a learner’s development, the program we see in Canada might be more conducive for the transition of students from intermediate to advanced level courses. Skutnabb-Kangas (1984) suggests that it takes between five to eight years longer to develop CALP (academic language skills) than BICS (ordinary communicative skills), so a program that from the start addresses accuracy

and involves ground work for CALP may help advanced language learners in the long run. It should be noted that the approximation of time to develop CALP is subject to variation, depending on

Something else that can be said of the needs of advanced learners is that their needs vary from person to person more than for lower level students. As Thomas (1984) states, there is more or less general agreement about what learners need at the early and intermediate stages of language learning, and a syllabus can be drawn up with the aim of covering all these basic elements. Once these basic elements have been acquired by the learner, however, it becomes increasingly difficult to know what to teach. Also, because of the meandering paths that advanced language learners have taken over the years of their language development—some having studied abroad, some having focused on memorization, some having married a native speaker of the L2—they come to advanced language courses with idiosyncratic strengths and weaknesses. Though we can say that advanced language learners are generally unified by their language proficiency, they are quite diverse in terms of their individual language needs, much more so than with lower level students.

Thomas (1984) found that advanced language learners commonly have problems with three areas: lexis, style, and appropriateness. Though she bases this on personal observation rather than empirical research, she would no doubt find anecdotal support from other teachers of advanced language students, including myself.

An additional problem that I have noticed is that advanced learners have sufficient communicative competence to successfully engage in most functions of language. Although it certainly is advantageous to have cultivated an effective level of communicative competence, advanced learners may not have the needed drive to move beyond the satisfactory level. This can lead to fossilization of the interlanguage. Because of its importance to the present discussion, a section of this chapter will be devoted to the issue of fossilization.

#### **Fossilization of the Interlanguage**

A problem that is often associated with advanced language learners is that they suffer from pronounced fossilization of the interlanguage. The interlanguage

(IL) is the learner's mental system of L2 knowledge (Selinker, 1972 as cited in Ellis, 1997). Fossilization has been defined as the process by which linguistic items, rules, or subsystems become permanently incorporated into the IL of a language learner, regardless of the learner's age or the amount of instruction in the target language (Selinker, 1974). That a linguistic form becomes permanently incorporated into one's IL in the process of fossilization is not problematic per se, but it becomes a problem when the linguistic form is not in keeping with the target language (TL) norms or when a simpler rule is permanently maintained in the interlanguage at the expense of adapting a more complex or TL-like form. Fossilization can occur at lower levels of language learning, but harmful effects of fossilization are most apparent at the advanced level. Advanced level learners seem to "plateau" in their language acquisition; fossilization acts as a barrier beyond which these learners do not progress. Unfortunately, because there has not been enough LLS research done for the sake of helping advanced learner, we presently do not know what LLS have proven especially useful for various advanced learners for overcoming fossilization. Furthermore, even if the effective LLS used by advanced learners for overcoming fossilization had been extensively investigated, the prescription of these LLS to other advanced learners would not necessarily be beneficial, given the differences in learning styles, learning needs, learner motivation, etc.

Tollefson and Fink (1983) look at three explanatory models of fossilization and create a hybrid model from these three. The first is the interactional model espoused by Vigil, Oller, and others. This model suggests that variables operating in conversational interactions between native and non-native speakers determine



whether the IL rule system of the learner is reinforced (leading to fossilization) or destabilized (leading to IL progress). The critical factor in this model is feedback, and the optimal learning environment is one in which affective feedback (facial expressions, tone of voice, etc.) is positive and cognitive feedback (information related through linguistic forms) is negative. The second model is the acculturation model, espoused by Schumann, Anderson, Stauble, and others. Here, fossilization is seen as the cessation of a learner's acculturation to the L2 society. Fossilization can be overcome by an increase in integrative motivation or by a decrease in the social and psychological distance between the learner and the L2 society. The third model is the biological model, espoused by Selinker, Lamendella, and others.

Sensitive/critical periods of IL development (determined by the age of the learner) and individual variation in genetically determined potential to acquire languages determine the extent of fossilization. Unlike the other two models, the critical variables are internal ones, and fossilization cannot be overcome—the damage is permanent.

Pointing out limitations and problems with each of these three models, Tollefson and Fink suggest a unified explanation of fossilization. There is some truth to all three models, but the nature of the process that they attempt to explain is different from what has previously been imagined. "Fossilization" is the biologically determined, permanent cessation of linguistic growth, whereas "jellification" (their coin) is the cessation of growth that can be overcome (Tollefson & Fink, 1983). It should be noted there is no data to support the idea that fossilization is biologically determined, but if such a state does exist, it is what we call "fossilization."

Any learning program that strives to assist advanced language learners must attempt to overcome (or at least examine the influence of) fossilization/jellification, since it is a problem that faces nearly all advanced language learners.

### **A Sociocultural paradigm of and Approach to LLS Development for Advanced Language Learners**

At this point, we have considered issues dealing with language learning strategies, with LLS instruction, and with advanced adult language learners. Given what we know, what sort of LLS instruction could we recommend for advanced language learners? Evidence in favor of the more widely recognized methods of LLS instruction has not been very convincing of the efficacy of these methods, and advanced language learners for the most part remain enigmatic, defying easy characterization.

For the sake of argument, we will presume that advanced language learners are **highly motivated learners** with sufficient time available to devote to language and LLS study. If we do not make this presumption, then no form of instruction—no matter how effective it is in theory—can help these learners.

In this essay, I would like to promote an intriguing alternative to LLS instruction offered by Donato and McCormick (1994). In their article, “A Sociocultural Perspective on Language Learning Strategies: The Role of Mediation,” the authors produce a novel approach to LLS instruction (or rather, “language development”) based on sociocultural theory; theirs is a new paradigm of LLS instruction/development. Sociocultural theory maintains that cultural institutions,

such as foreign language classrooms, and social interaction found in these “cultures” play important roles in an individual’s cognitive growth and development. The authors suggest that LLS are by-products of mediation and socialization into a community of language learning practice. This is in keeping with the works of other authors, such as Tollefson (1991), who claims that theory on motivation and on SLA needs to locate the learner within a social context.

Teachers strive to develop some degree of communicative competence in their language students. No one really questions the value of this. However, in a study by Nyikos and Oxford (1993), twelve hundred undergraduate language students revealed that functional practice strategies (those LLS typically associated with the development of communicative competence) are rarely used. There are two possible reasons for this. First, classrooms do not provide enough opportunities for functional language practice. Second, when classrooms do incorporate more realistic communication patterns and processes, often the grading and examination procedures do not reflect a communicative orientation. For instance, many language exams do not reflect authentic and purposeful language use. On a positive note, this state of affairs with language exams is being changed by the new Standards for Foreign Language Education.

If a language classroom is viewed as a culture unto itself with members who participate with a set of values, beliefs, and practices (cf. the Communicative Approach), LLS for the development of communicative competence are generated from the primary social practice of the classroom culture. That is, learning about and using any LLS, efficient or otherwise, are by-products of socialization into the

classroom practices of language learning. LLS are therefore more properly developed through a socialization process of greater participation in the practices of the classroom rather than through direct instruction.

Three aspects of sociocultural theory in particular merit some exposition. The first is the genetic method, as proposed by Vygotsky (1978). The central goal of sociocultural theory is to demonstrate how apparently individual psychological phenomena (e.g., LLS) depend on cultural systems of mediation. The method of investigating this is called the genetic method. The genetic method differs from other research on LLS by documenting strategic improvement as it develops. Rather than focus on the independent activities of the learners as if these were solitary activities, the genetic method investigates learners' growing use of LLS during their language learning experience and emphasizes the classroom culture as the legitimate domain of LLS study (Donato & McCormick, 1994).

The second aspect of sociocultural theory is activity theory, which provides the framework for understanding the composition of LLS. For Leontiev (1981), activity, and not the individual, is the most useful unit of analysis. Activity is seen in interpersonal terms and it consists of a subject, an object, actions, and operations. In the case of LLS, the subject is the language learner. The object is the goal of language learning and it motivates the activity. To achieve the goal, actions are taken by the learner, and actions are always goal-oriented. In this model, LLS are actions taken for the fulfillment of language learning goals. Operations are the ways by which an action is carried out, and these are dependent on the conditions under which

actions are executed. Operations, too, can be considered LLS, if one extends the definition of LLS to include specific techniques (Donato & McCormick, 1994).

One of the benefits of applying activity theory to LLS studies is that it offers more rigorous definitions of LLS than isolated labels can provide. For instance, actions can only properly be called LLS if they are driven by language learning goals. Take the case of guessing the meaning of words from the given context. If this is used to fulfill the goal of saving time rather than learning the language effectively, it might still be considered an “LLS” under other frameworks used by LLS researchers, but it would not be considered an LLS under activity theory (Donato & McCormick, 1994).

Activity theory is useful in investigations of LLS because it provides a framework for situating LLS use within the total context of a learner’s language learning context. Also, as we have just seen, activity theory allows the LLS researcher to define LLS more accurately than can be achieved with discrete-item lists and static categories (Donato & McCormick, 1994).

The third aspect of sociocultural theory that will be discussed is the idea of mediation. Mediation is seen as playing a central role in the construct of activity and generation of higher mental processes, including LLS. Mediators, in the form of objects (e.g., a piece of string tied around one’s finger as a mnemonic device), symbols (e.g., the symbolic form of language), or people (e.g., teachers), transform natural, spontaneous impulses into higher mental processes. Mediation is therefore the instrument of cognitive change. Mediation in the foreign language classroom often takes the form of textbooks, visual material, classroom discourse patterns,

opportunities for L2 interactions, and teacher assistance. All of these forms are embedded in the larger sociocultural context of the classroom. Change is seen as a social process and sociocultural mediation is seen as the central means through which change occurs. The construction of LLS, therefore, are the result of a process of mediation analogous to other forms of socioculturally mediated development, such as initiation into a professional community (Donato & McCormick, 1994).

LLS instruction can to some extent be considered the mediator of the language learning process. However, as Stone (1989) suggests, the goal of the teacher who is interested in improving LLS selection and use by his or her students should not have as a goal the training of specific LLS, but the encouragement of the learner in question to adopt a new, better strategic conception of language tasks.

Donato and McCormick conducted a sort of LLS instruction study following the tenets of sociocultural theory. I describe it vaguely as “a sort of LLS instruction study,” because it is not properly an LLS interventionist study in that no direct LLS training was offered. Instead, the study aimed at improving LLS use by assisting learners in the development of their own LLS.

The learners in this study, ten female undergraduate students enrolled in a fifth-semester French conversation course, were asked to keep working portfolios of their language development. Portfolios differ from diaries or journals in that in addition to being reflective, portfolios require students to provide concrete evidence of their growing LLS use. This evidence had to be in the form of tangible or observable products. Submissions included cassette recordings, a piece of creative writing, a report on an out-of-class activity involving the use of French, an in-class

report, a homework assignment, and reports of French films. Providing evidence and reflecting on it was hoped to mediate and foment the development of LLS. Not only were the students expected to provide concrete evidence of their language progress, but they also had to explain how their portfolio pieces served as evidence. The portfolio project represented an attempt to create a community structure of language learning practice in which students had the frequent opportunity to overtly consider their own learning. At various times during the course, the students were asked to reflect on their language learning and it was these reflections that served as the indicators of LLS development across time and task. The results showed that student performance-based assessment can have a powerful effect on expanding LLS use (Donato & McCormick, 1994).

The use of the portfolios represented an expansive view of LLS that includes the goals of learning and acknowledges the sociocultural condition of the classroom culture. Students participated in problematizing and critically examining their own language learning, discovering new strategic orientations to the task of learning to converse in a foreign language, and exploring applications of their new knowledge. This is unlike the more typical *encapsulated view* of LLS that are found in other LLS instruction studies, in which LLS are taught to the students by the instructor (Donato & McCormick, 1994).

From the portfolios, the researchers observed a cyclic pattern in the language learning processes that took place in this course. All the students progressed through a four-stage cycle. First, they self-assessed by identifying areas for improvement. Second, they set goals. Third, they implemented self-selected LLS or specific plans

of action. Fourth, they connected to and reflected upon past performance. It is important to note that in this progression, both goals and strategies moved from being unspecific or unfocused to being specific or focused. It is important to remember that LLS are goal-directed activities (Donato & McCormick, 1994). This point cannot be stressed enough. It can be argued that this specification of goals and the LLS to fulfill them is an important factor in the appropriate selection and use of LLS, which is seen as *the* defining characteristic of successful, advanced language learners.

Identifying a goal is only the first step, however, in the genesis of LLS. The fulfillment of goals requires an active response on the part of the learner. “Unlike goal setting, which can reside in the world of speculation and desires, strategies need to be enacted to be defined as such” (Donato & McCormick, 1994, p. 459). This harks back to the discussion on the definition of LLS in Chapter 3. This need for active participation on the part of the learner is supported by an observation by Harlow (1988) in a review of LLS correlational studies. She observed that not only must the learner actively participate in the learning process, but also the greater degree of active involvement of the learner, the more effective the learning process becomes. We should recall that one of the common characteristics of advanced learners is that they have, at least in their past language learning processes, demonstrated effort. Having had relatively successful experience with active, involved language learning, advanced language learners have demonstrated by their past behavior that they have what it takes, in terms of involvement with the learning task, to continue to succeed in language learning.



The findings from this study indicate a close connection between self-directed goal setting, self-assessment, and LLS development in language learners:

For these students, strategies evolved into highly specific courses of action that derived from their own self-assessment and goal-setting activity. The progression from “I want to speak French” (unfocused goal) to “I’ll speak more in class” (focused goal) to finally “I talk to my friend two times a week on the telephone” (focused strategy) was the result of a gradual process of socializing oneself into the culture of authentic language learning. Strategy restructuring is also consistent with Leontiev’s notion of the object-relatedness of goals; that is, individuals are active transformers of their world rather than passive recipients of input (including strategy training). Self-assessment and goal setting is one way, therefore, of increasing the motivation to move toward more expanded ways of learning and knowing.

(Donato and McCormick, 1994, p. 459)

This study proved successful in helping students develop functional practice LLS. Functional practice did not seem to be initially obvious as an LLS to these students, even though they were in their fifth semester of foreign language study. In their first portfolio entries, only three of the ten students provided tape recorded conversations as evidence of their progress. By the third portfolio submission three months later, all ten students were actively seeking out-of-class opportunities to speak French and provided cassette recordings or written summaries of conversational activity (Donato & McCormick, 1994). This may in fact indicate

the efficacy of the portfolio project in developing LLS selection and use in these students, but other reasons might have accounted for increased submission of tapes. For instance, an opportunity to speak French outside of class—the arrival of some short-term exchange students, for instance—might have presented itself mid-way through the semester. However, it is likely that the classroom context itself, with some students tape-recording conversations and this inspiring others in the classroom community to do likewise, led in part to the increased submission of tapes. This is in keeping with Donato and McCormick’s view of the activity of the classroom as being “culturally” determined (in this sense, meaning the classroom “culture”).

The students also became increasingly critical of their own strategy use. This critical awareness of the benefits of functional practice LLS is indicated in their written end-of-semester reflections. According to Engstrom (1991), students need to engage in research-like activities by questioning the authority of their own textbooks and problematizing their learning experiences. Thus, language learners who believe that teachers are the authoritative source of knowledge are likely to avoid the self-directed strategies necessary to achieve higher levels of language proficiency. Donato and McCormick (1994) find that when conditions for critically examining learning are provided, students can develop an awareness of their own strategy use at a personally meaningful level.

Not only was the LLS development project self-directed, but it also incorporated benchmarks in the form of reviews and discussions of the concrete evidence of LLS development that the students deposited in their portfolios. Research has shown that students judge their own abilities better when self-evaluation

is anchored to specific benchmark such as the ones mentioned above (LeBlanc & Painchaud, 1985; Pierce, Swain, & Hart, 1993). In other words, students can more accurately describe and assess their abilities by comparing them to definite tasks (such as rating one's performance on a particular task) than by doing purely introspective, open-ended self-evaluations. Portfolio submissions were analyzed for frequency of retrospective comments from the submitted concrete evidence. Just how they were analyzed is not clear. It was found that over time students became more frequent users of their own work and used participation in the course as a foundation for reflection. The use of evidence grounded the learners in their own activity and influenced the development and refinement of their strategy use (Donato & McCormick, 1994).

LLS instruction proves itself to be most effective when the self-investment and the concomitant use of innovative LLS are fostered, rewarded, and valued (Nyikos & Oxford, 1993). Donato and McCormick (1994, p. 462) suggest that this can best be realized through sociocultural theory.

The success of these students in identifying, refining, and developing their own strategies was a direct result of an environment that mediated language learning in reflective and systematic ways through the use of the student portfolio. Rather than merely "training" students to use encapsulated strategies, the classroom culture was itself strategic. Through the use of the portfolio, the classroom became a context for self-investment, critical analysis, and the discovery of new strategic orientations to language learning.

In my opinion, Donato and McCormick (1994) present a most valuable model of an LLS development program. I side with their standpoint that direct LLS training has not proven to be the most efficient way to improve a learner's repertoire of LLS and that learners should somehow be encouraged to evolve as LLS users by defining

or setting language learning goals for themselves. Promoting the use of a portfolio with concrete evidence of their LLS selection and use makes for a rich resource and effective mediator that learners can use to develop their LLS repertoires via regular review and revision over time.

This approach to LLS development seems especially conducive for advanced language learners. This approach addresses the individual language needs of the learners (which is an issue more for advanced learners than for lower level learners) while at the same time promoting group or communal cohesion in the class and group participation in the common activity of the class. This rectifies a particularly troublesome problem of teaching advanced language classes: working on the much-needed language development on the individual level within the framework of group work. This problem may be the reason why there is usually no attempt to coordinate multi-sectioned classes for advanced levels. As Gutierrez (1991) points out, there is usually no attempt to articulate work to be done at one advanced level course over the next higher advanced level course. I advocate more rigorous development and design of advanced level language courses, and the adoption of the approach promoted by Donato and McCormick lends itself to this pursuit.

### **A Sociocultural Paradigm for and Approach to LLS Development: Criticisms, Qualifications, and Modifications**

At this point, it would be worthwhile to consider potential criticisms and qualifications that accompany this study.

From my reading of this article, I was not able to form a clear idea of the role of the teacher. For researchers to replicate this study or for teachers to apply this approach in their classrooms, an understanding of the role of the teacher is important. The innovative use of LLS are somehow fostered, rewarded, and valued in the classroom culture, but it was unclear just what sort of LLS counseling was going on, if any. In a sense, if the teacher made no attempt to counsel the student on the selection and use of LLS, this is understandable. How can the teacher, unless he or she is an expert in LLS, know just what LLS or LLS combinations are worth teaching to each student? In fact, this is one of the real strengths of this approach: it makes no attempt to teach or preach LLS and allows students, through the self-assessment of goals, to develop and revise their own LLS repertoire. However, myself having had experience teaching advanced language learners, I realize that the teacher is in a good position to share (not teach) LLS that have been used successfully by other students. An added bonus to “sharing” and not “teaching” LLS is that this overcomes negative affective issues that plague advanced learners, such as feeling patronized by LLS instruction, becoming irritated with LLS instruction, and resisting modification of their existing LLS repertoires. Moreover, the teacher could assist the learner with the design of effective *action plans* that help fulfill the learner’s language learning goals. The teacher could then serve a valuable role as a co-designer of LLS development action plans, which goes beyond the teacher’s role as the designer of the overall procedures and framework of the language class. Finally, if the student aims at improving his/her knowledge of lexis, style, or appropriateness—and Thomas (1984) suggests that these are typical needs of advanced students—then only through the

mediation of the teacher or native speakers of the L2 can LLS that address with these needs be effectively realized.

In a personal communication with R. Donato (1999), I learned that the teacher asked probing questions to the students about how they were approaching their learning of conversation skills, such as “Is this working for you?” and “How can you achieve the goal you set out for yourself?”

There is much that commends this approach to LLS development to language teachers, and one of the most attractive features in my opinion is the emphasis on goals as the precursors to appropriate strategic action. However, certain language learning goals may be better or more natural than others. An interesting point has been made by Lennon (1989) concerning the general language learning goal of advanced learners. Advanced learners who seek to develop an L2 system that parallels that of their L1 have an “unnatural” goal. Wandruszka (1979 as cited in Lennon, 1989) suggests that the natural state for humans is neither balanced bilingualism nor multilingualism, but rather multilingualism with language dominance and functional differentiation. The attempt by advanced language learners to raise their L2 proficiency level to match their L1 proficiency in as many respects as possible does not match the common profile of the bilingual speaker. This raises the question of whether the goals of advanced language learners are well founded. This is particularly important for the type of sociocultural model of LLS development espoused by Donato and McCormick, given the goal-directed nature of language learning activity.

The approach taken by Donato and McCormick differs from much of the research on LLS that emphasizes the identification of strategy types, variables affecting the choice of strategies, or investigations of the teachability or learnability of LLS. Also, their perspective on LLS developmental programs questions the notion that LLS are the product of a learner's cognitive style, personality, or hemispheric preference. A criticism that could be raised against the standpoint of these authors is that they view LLS as primarily (and perhaps exclusively) deriving from the culture and activity of the classroom. Considering the substantial evidence that a variety of factors significantly affect LLS selection and use, these authors may be seen as going too far in their reliance on sociocultural theory to explain LLS. However, for any LLS in a learner's repertoire, a strong case can be made that it entered the repertoire as a by-product of activity in a cultural system.

At least one factor (other than the nature of the classroom culture) that should be considered in a study such as this is gender. This study demonstrates the successful and effective adoption of an approach to LLS development. The subjects, however, were all female, and this may have contributed to the success of this project. In a study by Graham (1997), six of the seven students who were not in favor of adopting LLS training were male. There may, in fact, be a relation between gender and acceptance of (or resistance to) forms of LLS instruction. However, we should remember that gender is itself a social construct (R. Donato, 1999). If it is gender (nurture) and not sex (nature) that accounts for differences in LLS adoption and use, sociocultural theory can be called upon to account for these differences.

One of the reasons that this study demonstrated success of LLS development while others did not was that it lent itself to the investigation of LLS development over time. Other studies might have “failed” only because 1) the students did not have enough time to become comfortable using the new LLS over the short time of the study, or 2) the students were working under unfocused/unspecified goals and did not have time to transform these into more effective and motivating focused/specific goals before the end of these studies. Furthermore, and more importantly, the success of this study lay in the development of the LLS repertoires of these students and their increased awareness and self-direction in LLS selection and use. This study did not demonstrate that the students, by upgrading their LLS repertoire, had improved their command of the L2. That is, no correlation between LLS selection and use and learning outcomes was determined. Being a teacher of advanced language learners and having read the literature on LLS extensively, I recognize the potential usefulness of this approach and see it as a rich alternative to existing methods of LLS instruction. Nevertheless, further research must demonstrate that this approach actually helps in language learning.

Another aspect of this study that may have strongly accounted for its success was the goal-oriented nature of the work done by the students. It may be that this, more than the sociocultural approach to language learning, resulted in the enrichment of the students’ LLS repertoires. If the sociocultural aspects of the approach used in this study are not really the cause of success, then perhaps some of the methodology of this study can be altered for future studies. For instance, instead of maintaining a portfolio, perhaps a regularly recorded and often revised action plan may satisfy the



conditions for effective LLS development and perhaps make time spent on metacognitive tasks more efficient than maintaining a portfolio. If an LLS researcher were to abandon sociocultural theory for some other pedagogical or language learning theory, action plans would be seen as a strategic learning tool with only a hint of being a cultural tool, as well. If an LLS researcher, however, were to keep the sociocultural perspective, then an action plan could be seen as a mediator of language learning. The replacement of the portfolio with an action plan would not be in contention with the ideas espoused by Donato and McCormick, who see the portfolio as one (particularly effective) form of mediation and who allow for other types of mediators. Whatever mediator is used, we should realize that the effectiveness of the use of mediators may depend strongly on how well the use of these mediators is taught or explained to students. For Donato and McCormick's approach to be accepted and used by a wide range of teachers, the issue of how to teach students to use mediators will have to be adequately addressed.

This approach to LLS development gauged progress from the reflections of the students on their language learning, using their portfolio submissions. This study was seen as having been effective based on the evidence provided by the reflections. It is not clear, however, just how these reflections were analyzed or handled by the researchers. How are the student reflections shown to relate to LLS development?

Further research is needed to determine suitable methods of helping advanced language learners develop their LLS repertoires. Despite the concerns that have just been raised, the model provided by Donato and McCormick (1994) offers a worthy line of pursuit.

## CONCLUSION

Despite the attention that language learning strategy (LLS) research has attracted in recent years, LLS studies have not yet provided us with a satisfactory picture of the nature of LLS, LLS learners, and LLS instruction. Perhaps one reason for this is that the investigation instruments of LLS studies are such that it will take many more years to arrive at a clearer understanding of LLS. What is more critical, however, is that these instruments are often involved in the challenging endeavor of examining mental operations that are not directly observable, and one has to wonder how accurate the findings are.

Another possible reason for the less than satisfactory understanding that we have of LLS is that LLS studies were diverted into areas that may have been leading us astray, such as the studies of “the good language learner.” These studies may have incorrectly tinted our beliefs not only about LLS and LLS instruction, but also about the goals of LLS research.

Ex post facto correlational studies—studies that aim to find a relationship between LLS selection and use and learning outcomes, yet only observe and do not teach LLS—have typically found correlations between LLS and learning outcomes. Unfortunately, LLS interventionist correlational studies—those studies that do provide LLS training—have produced only limited success so far. As suggested in the previous chapter, LLS researchers might do well to consider other nonconventional paradigms of and approaches to LLS instruction/development.

Advanced adult language learners stand to profit considerably from LLS research, yet they have only infrequently been the beneficiaries of work done in LLS studies. The following are some of the questions that future research should address:

- How can advanced level learners, given their individual needs and aptitudes, be assisted in the development of their LLS repertoire? Is it even possible for their repertoires to be effectively modified, such that these learners show improved use of LLS over time and task? Can the modification of LLS repertoires lead to improved language learning?
- How are LLS used effectively (by themselves and in combinations)? How does the learner choose which LLS to use for different tasks in different contexts?
- How can measures and instruments be made more valid and reliable for assessing the selection and use of LLS by learners, the effectiveness of LLS on language learning, and the effectiveness of LLS instruction on LLS development?
- How can changes in LLS selection and use be measured as learners progress to higher levels of L2 proficiency?
- To what extent do factors other than LLS affect language learning? To what extent do these other factors directly or indirectly affect the selection and use of LLS? What does this mean for LLS instruction or LLS development programs?

As of this writing, LLS research is experiencing growing pains as it moves out of its infancy into a stage of greater maturity. LLS researchers will no doubt move away from attempts to characterize the successful language learners and the successful language learning strategies in general terms, but will redirect their efforts toward goal-oriented, context- or task-specific longitudinal LLS studies involving types of students (along the lines of the various factors that affect SLA and LLS selection and use) as these students attempt to learn a second language inside and outside of the classroom.

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Table 3.1

**LLS Definitions**

<b>Author and Date</b>	<b>Definition</b>
<b>Rubin, 1975</b>	The techniques or devices which a learner may use to acquire knowledge. (This is a definition of “strategy.”)
<b>Bialystok, 1978</b>	Optimal means for exploiting available information to improve competence in a second language.
<b>Ellis, 1985</b>	The means by which learners internalize L2 rules.
<b>Wenden, 1986</b>	Steps or mental operations used in problem-solving that require direct analysis, transformation, or synthesis of learning materials in order to store, retrieve, and use knowledge.
<b>Rubin, 1987</b>	Strategies which contribute to the development of the language system which the learner constructs and affects learning directly.
<b>Chamot, 1987</b>	Techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information.
<b>Oxford, Lavine, &amp; Crookall, 1989</b>	Actions, behaviors, steps, or techniques—such as seeking out target language conversation partners, or giving oneself encouragement to tackle a difficult language task—used by learners to enhance learning.
<b>Chamot &amp; Kupper, 1989</b>	Techniques which students use to comprehend, store, and remember new information and skills.
<b>O’Malley &amp; Chamot, 1990</b>	The special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information.
<b>Vann &amp; Abraham, 1990</b>	Behaviors that learners engage in to learn a second/foreign language.
<b>Oxford, 1990</b>	Specific actions taken to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations.
<b>Wenden, 1991</b>	Mental steps or operations that learners use to learn a new language and to regulate their efforts to do so.
<b>Oxford, 1993</b>	Specific actions, behaviors, step, or techniques that students employ—often consciously—to improve their own progress in internalizing, storing, retrieving, and using the L2.
<b>Green &amp; Oxford, 1995</b>	Specific actions or techniques that students use, often intentionally, to improve their progress in developing L2 skills.
<b>Cohen, 1998</b>	The conscious thoughts and behaviors used by learners with the explicit goal of improving their knowledge and understanding of a target language.

Table 3.2

**Descriptions of LLS (O'Malley et al., 1985a, pp. 33-34)**

<b>Learning Strategy</b>	<b>Descriptions</b>
<b>A. METACOGNITIVE STRATEGIES</b>	
<b>Advance organizers</b>	Making a general but comprehensive preview of the organizing concept or principle in an anticipated learning activity.
<b>Directed attention</b>	Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors.
<b>Selective attention</b>	Deciding in advance to attend to specific aspects of language input or situational details that will cue the retention of language input.
<b>Self-management</b>	Understanding the conditions that help one learn and arranging for the presence of those conditions.
<b>Advance preparation</b>	Planning for and rehearsing linguistic components necessary to carry out an upcoming language task.
<b>Self-monitoring</b>	Correcting one's speech for accuracy in pronunciation, grammar, vocabulary, or for appropriateness related to the setting or to the people who are present.
<b>Delayed production</b>	Consciously deciding to postpone speaking to learn initially through listening comprehension.
<b>Self-evaluation</b>	Checking the outcomes of one's own language learning against an internal measure of completeness and accuracy.
<b>Self-reinforcement</b>	Arranging rewards for oneself when a language learning activity has been accomplished successfully.
<b>B. COGNITIVE STRATEGIES</b>	
<b>Repetition</b>	Imitating a language model, including overt practice and silent rehearsal.
<b>Resourcing</b>	Using target language reference materials.
<b>Directed physical response</b>	Relating new information to physical actions, as with directives.
<b>Translation</b>	Using the first language as a base for understanding and/or producing the second language.
<b>Grouping</b>	Reordering or reclassifying and perhaps labeling the material to be learned based on common attributes.
<b>Note-taking</b>	Writing down the main idea, important points, outline, or summary of information presently orally or in writing.
<b>Deduction</b>	Consciously applying rules to produce or understand the second language.
<b>Recombination</b>	Constructing a meaningful sentence or larger language

	sequence by combining known elements in a new way.
<b>Imagery</b>	Relating new information to visual concepts in memory via familiar, easily retrievable visualizations, phrases, or locations.
<b>Auditory representation</b>	Retention of the sound or similar sound for a word, phrase, or longer language sequence.
<b>Key word</b>	Remembering a new word in the second language by 1) identifying a familiar word in the first language that sounds like or otherwise resembles the new word, and 2) generating easily recalled images of some relationship between the new word.
<b>Contextualization</b>	Placing a word or phrase in a meaningful language sequence.
<b>Elaboration</b>	Relating new information to other concepts in memory.
<b>Transfer</b>	Using previously acquired linguistic and/or conceptual knowledge to facilitate a new language learning task.
<b>Inferencing</b>	Using available information to guess meanings of new items, predict outcomes, or fill in missing information.
<b>Question for clarification</b>	Asking a teacher or other native speaker for repetition, paraphrasing, explanation and/or examples.
<b>C. SOCIAL MEDIATION</b>	
<b>Cooperation</b>	Working with one or more peers to obtain feedback, pool information, or model a language activity.

Table 4.1

**Questionnaires Used to Investigate LLS**

<b>Questionnaire Designer/LLS Researcher</b>	<b>LLS Questionnaires, Functions, and Comments</b>
<b><u>Bialystok, 1996</u></b>	<p>A 12-item , structured, untitled rating scale.</p> <p><b>Function:</b> to assess LLS use and to compare it with language learning success.</p> <p><b>Comments:</b> Reliability and validity data were absent from this instrument.</p>
<b>Politzer, 1983</b>	<p>An instrument containing 51 items (with a 1-4 answer range) in three groups: general behaviors, classroom behaviors, and interactions outside of class.</p> <p><b>Function:</b> to assess LLS use and to compare it with language learning success.</p> <p><b>Comments:</b> Reliability and validity data were absent from this instrument.</p>
<b>Politzer &amp; McGroarty, 1985</b>	<p><u>Behavior Questionnaire</u> containing 66 items divided into three groups: individual study behaviors, classroom behaviors, and interactions outside of class.</p> <p><b>Function:</b> to assess LLS use and to compare it with language learning success.</p> <p><b>Comments:</b> Reliability was marginally acceptable.</p>
<b>McGroarty, 1987</b>	<p><u>Language Learning Strategy Student Questionnaire</u> containing 56 items (with a 0-6 answer range) in three groups (see Politzer &amp; McGroarty, 1985).</p> <p><b>Function:</b> to assess LLS use and to compare it with language learning success.</p> <p><b>Comments:</b> Reliability and validity data were absent from this instrument.</p>
<b>Chamot, O'Malley, Kupper, &amp; Impink- Hernandez, 1987</b>	<p><u>Learning Strategies Inventory</u> containing 48 items (with a 1-4 answer range) in five groups: listening in class, speaking in class, listening and speaking outside of class, writing, and reading.</p> <p><b>Function:</b> To investigate the use of 16 LLS.</p> <p><b>Comments:</b> Reliability and validity data were absent from this instrument.</p>
<b>Padron &amp;</b>	<p>A 14-item instrument with a 1-3 answer range.</p>

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<b>Waxman, 1988</b>	<p><b>Function:</b> To assess the use of reading strategies of Hispanic ESL students in grades 3-5 and to compare it with language learning outcomes.</p> <p><b>Comments:</b> Reliability and validity data were absent from this instrument.</p>
<b>Oxford, 1990</b>	<p><u>The Strategy Inventory for Language Learning (SILL)</u> with versions containing 80 items (for English speakers learning a foreign language) and 50 items (for English learners) with five Likert-scale responses in six groups (as of 1989): memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies.</p> <p><b>Function:</b> Originally designed to assess the frequency of use of LLS by students of the Defense Language Institute Foreign Language Center in Monterey, California but now in use in language classrooms around the world.</p> <p><b>Comments:</b> Reliability and validity data are provided.</p>
<b>Noguchi, 1991</b>	<p><u>Questionnaire for Learners</u> containing 24 items on a 3-point scale followed by 24 items on a 4-point scale.</p> <p><b>Comments:</b> This was based largely on the SILL.</p>

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(from Oxford, 1996c)

**Table 5.1****List of Factors that May Affect SLA and LLS Selection and Use****Biological Factors**

Aptitude\*

Age

Sex

Hemispheric specialization

Physical limitations

Mental limitations

Predisposition for language learning (biological aspects of aptitude)

Language disabilities

Stages of L2 development (including innate constraints on the speed of acquisition)

Birth order

**Personality Factors**

Self-esteem

Extroversion

Anxiety

Risk-taking

Sensitivity to rejection

Empathy

Inhibition

Tolerance of ambiguity

Stubbornness

Will

Identity

**Neurological, Psychological, and Cognitive Factors**

Language learning strategies

Cognitive styles

General learning strategies and techniques

Study habits

Psychological type

Psychological background/psychological state

General information processing and memorizing styles

Language memory processing style/system

Memory limitations

General learning style

L1 learning style, including changes over time

L2 learning style, including changes over time

Awareness

Brain hemisphericity

Mental conditions/ailments

Mental trauma

Individual differences in brain neurology/neuropsychology  
 Psychosomatic factors

### **Attitudinal and affective Factors**

Motivation(s)  
 Motivational orientation(s)  
 General view of life (rosy?)  
 General view of people (cynical?)  
 Attitude toward the L2  
 Attitude toward the L2 culture  
 Attitude toward specific people in and specific aspects of the L2 culture  
 Desire to assimilate into/interact with the L2 culture  
 Ego investment in L2 learning  
 Time of life (lifestyle, living conditions, general attitudes about life at the time of learning—all are somewhat age-dependent)  
 Interests  
 Reasons for learning the L2  
 Positive/negative learning experiences  
 Positive/negative language learning experiences  
 Willingness to alter or adapt one's identity  
 Adventurousness  
 Submissiveness (to L2 speakers)  
 Fear of failure  
 Fear of success

### **Social, Contextual, and Situational Factors (including resource factors)**

Social/group context  
 Gender  
 Age (as affects social circles, etc.)  
 Race  
 Nationality  
 Location  
 Language policies  
 Language planning  
 Socio-economic status/affluence  
 Situations in which one needed/needs to use the L2  
 Knowledge of L2 culture  
 L2 input  
 Position and status at work  
 Position and status among peers  
 Position and status among other members of the TL communities one has lived and worked in  
 Circumstances/occurrences in one's life at the time of learning (circumstance/occurrence-dependent factors)  
 Language learning heritage in one's family/community  
 Time availability

Financial situation/financial means  
 Available texts and learning materials  
 Teacher influence  
 Parental influence  
 Peer influence  
 Influence of other people (neighbors, store clerks, etc.)  
 Influence of audience/listener  
 Influence of speaker  
 Formal vs. informal learning  
 Cultural differences between the L1 society and L2 society  
 Distractions  
 Necessity

### **Language Factors**

The contrast between one's L1 and L2 (and L3, etc., if applicable)  
 The nature of the L1  
 The nature of the L2  
 The nature of the L3, L4, and other (if applicable)  
 One's proficiency in one's L1  
 One's proficiency in one's L2  
 One's proficiency in one's L3, L4, and others (if applicable)  
 Language tasks that one needed/needs to perform  
 Other language learning experiences (language education background)

### **Educational Factors**

LLS training  
 General educational background (in its influence on learning style; in its positive/negative reinforcement in general learning; etc.)  
 Cultural factors in education  
 Knowledge of linguistics/SLA theory  
 Educational opportunities  
 Educational expectations/assumptions  
 Teacher: bilingual or monolingual  
 Teacher: if bilingual, raised bilingual or not  
 Teacher: linguistic competence and communicative competence  
 Teacher: native speaker or non-native speaker of L1  
 Teacher: native speaker or non-native speaker of L2

\*Aptitude (i.e., that which the learner brings to the learning of the L2 such that the learning of it is facilitated in some way) could fall under each of these categories, in that the composition of aptitude can be credited to a variety of factors.



Table 5.2

**Findings on Factors that May Affect the Selection and Use of LLS**

<b>Factor</b>	<b>Research Findings</b>	<b>Proficiency Level of Subjects</b>
<b>Aptitude</b>	<ul style="list-style-type: none"> <li>• Aptitude relates to the ability to form associations, forming associations is an LLS for learning vocabulary (Cohen &amp; Apehek, 1980).</li> <li>• LLS use is not related to aptitude (Bialystok, 1981).</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced, intermediate, and beginning learners</li> <li>• High school French students who had been studying for four to six years</li> </ul>
<b>Attitude</b>	<ul style="list-style-type: none"> <li>• LLS use is related to attitude (Bialystok, 1981).</li> </ul>	<ul style="list-style-type: none"> <li>• High school French students who had been studying for four to six years</li> </ul>
<b>Awareness of LLS</b>	<ul style="list-style-type: none"> <li>• Some researchers have found increasing LLS awareness at higher language levels (Tyacke &amp; Mendelsohn, 1986 as cited in Oxford, 1990b).</li> <li>• Some researchers say that even less successful learners are aware of their LLS (Chamot &amp; Kupper, 1989).</li> <li>• Some researchers say that learners are generally unaware of their LLS (Nyikos, 1987).</li> </ul>	<ul style="list-style-type: none"> <li>• Higher and lower level students</li> <li>• Advanced, intermediate, and beginning learners</li> <li>• Beginning learners</li> </ul>
<b>Career Orientation</b>	<ul style="list-style-type: none"> <li>• Career orientation, defined as either field of specialization or current employment position, influences LLS selection and use:             <ul style="list-style-type: none"> <li>• Politzer &amp; McGroarty, 1985</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Subjects had attained some English proficiency for graduate study in the</li> </ul>

	<ul style="list-style-type: none"> <li>Ehrman &amp; Oxford, 1989</li> </ul>	U.S. <ul style="list-style-type: none"> <li>Relatively sophisticated adult language learners</li> </ul>
<b>Cognitive Capacity</b>	<ul style="list-style-type: none"> <li>For novice writers, the attention needed for certain aspects of a difficult task can leave the learner with little space capacity for implementing more sophisticated metacognitive LLS (Bereiter &amp; Scardamalia, 1987).</li> </ul>	<ul style="list-style-type: none"> <li>Beginning learners</li> </ul>
<b>Compatibility with Teaching Strategies</b>	<ul style="list-style-type: none"> <li>Strategies used by the language teacher seem to have an influence on the LLS of the student:             <ul style="list-style-type: none"> <li>Oxford &amp; Nyikos, 1989</li> <li>Politzer, 1983</li> </ul> </li> <li>Note: This factor can be related to the factor of cultural background, i.e., a native-speaking teacher of the L2 may have teaching strategies that are not in harmony with the LLS of his/her students, who are from a different culture.</li> </ul>	<ul style="list-style-type: none"> <li>Relatively inexperienced language learners</li> <li>Advanced, intermediate, and beginning learners</li> </ul>
<b>Conception of Learning Process</b>	<ul style="list-style-type: none"> <li>Students' opinions about language learning can affect how they go about it (Horwitz, 1987).</li> </ul>	<ul style="list-style-type: none"> <li>Intermediate learners</li> </ul>
<b>Cultural Background</b>	<ul style="list-style-type: none"> <li>There have been at least 36 studies done on LLS and cultural backgrounds with various findings. Though it is clear that cultural background does affect LLS selection and use, it remains difficult to define the characteristic LLS selection and use of any cultural group.</li> <li>Perhaps the most often cited example of cultural differences is that some Asians typically use memorization LLS more than speakers from other cultures:             <ul style="list-style-type: none"> <li>LoCastro, 1994</li> <li>Politzer &amp; McGroarty, 1985</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Learners of various levels</li> <li>Advanced learners</li> <li>Subjects had attained</li> </ul>

	<ul style="list-style-type: none"> <li>• However, in a study of 850 Chinese university students by Gu and Johnson (1996), these researchers found that their Asian subjects did not dwell on memorization strategies and used more meaning-oriented LLS for language learning.</li> <li>• If learning strategies that are opposed to a learner's strategy preferences, especially those related to national origin or cultural background, are taught to the learner, there may be learner resistance to LLS training. New LLS may have to be camouflaged under the guise of old, familiar ones in order to be taught (Sutter, 1987 as cited in Oxford, 1990b).</li> </ul>	<p>some English proficiency for graduate study in the U.S.</p> <ul style="list-style-type: none"> <li>• University students of EFL with at least six years of EFL study (no necessarily advanced)</li> <li>• (Level unknown)</li> </ul>
<b>Educational Background</b>	<ul style="list-style-type: none"> <li>• Educational background may influence LLS selection and use (Bereiter &amp; Scardamalia, 1987).</li> </ul>	<ul style="list-style-type: none"> <li>• Beginning learners</li> </ul>
<b>Flexibility of LLS Use</b>	<ul style="list-style-type: none"> <li>• More successful learners use LLS more flexibly (Abraham &amp; Vann, 1987).</li> </ul>	<ul style="list-style-type: none"> <li>• Intermediate learners</li> </ul>
<b>Gender</b>	<ul style="list-style-type: none"> <li>• Women use LLS more often than men (SILL). Fourteen items on the SILL were used significantly more often by women than men. Men used one LLS significantly more often than women did: watching television programs and movies in English. However, only some items on the SILL showed significant variation, there was no overlap between the LLS used more often by women, and there were actually more men than women in the advanced courses on the observation campus (Green &amp; Oxford, 1995).</li> <li>• Females showed greater LLS use than males for three of the five factors that emerged in a study by Oxford and Nyikos (1989). Males did not show greater LLS use than females on any factor.</li> <li>• Gender-related differences were found in memory LLS: Men do better</li> </ul>	<ul style="list-style-type: none"> <li>• Intermediate, basic, and pre-basic learners</li> <li>• Relatively inexperienced language learners</li> <li>• Beginning learners</li> </ul>

	<p>memorizing words with pictures and color than women, whereas women do better memorizing words with pictures and no color (Nyikos, 1987).</p> <ul style="list-style-type: none"> <li>• There are higher levels of LLS use among women than men (Ehrman &amp; Oxford, 1989).</li> <li>• “Variance due to sex of learner seems relatively minor” (Politzer, 1983).</li> <li>• No significant gender differences were found in LLS use (Lalonde, 1998).</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively sophisticated adult language learners</li> <li>• Advanced, intermediate, and beginning learners</li> <li>• Intermediate learners</li> </ul>
<b>Individual Strengths and Weaknesses</b>	<ul style="list-style-type: none"> <li>• It was hypothesized that a less successful learner chose LLS that matched her forte, oral communication (Vann &amp; Abraham, 1990). Success in this study was equated with relative speed of language learning.</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced and intermediate learners</li> </ul>
<b>Motivation</b>	<ul style="list-style-type: none"> <li>• More motivated students tend to use more LLS than less motivated students, and the particular reason for studying the language (motivational orientation, especially as related to career field) is important in the choice of LLS. In fact, the degree of expressed motivation to learn the language was the most powerful influence on strategy choice (Oxford &amp; Nyikos, 1989).</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively inexperienced language learners</li> </ul>
<b>Personality</b>	<ul style="list-style-type: none"> <li>• Tolerance of ambiguity: It was a negative predictor of various LLS which involve focusing on individual language elements. Curiously, tolerance of ambiguity positively predicted proofreading one’s written work for spelling and accent marks (Ely, 1989).</li> <li>• Confidence: There are generally strong correlations between reported LLS use and confidence or self-efficacy in students’ beliefs about their own effectiveness as language learners (LLS training) (Chamot &amp; O’Malley, 1993).</li> </ul>	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> and 3<sup>rd</sup> year university Spanish students</li> <li>• 1<sup>st</sup> year students in secondary school foreign language courses</li> </ul>
<b>L2/The Language Studied</b>	<ul style="list-style-type: none"> <li>• Language studied influences the use of LLS and LLS may influence the selection of the language studied (e.g., more strategy-wise students may opt to study more challenging or exotic foreign languages). In this study, students of Spanish used fewer “positive” LLS than students of French and</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced, intermediate, and beginning learners</li> </ul>

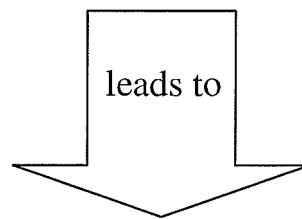
German (Politzer, 1983). As we have seen from previous discussions, we should be wary of speaking of “good” or “positive” LLS.		
<b>Learning Style</b>	<ul style="list-style-type: none"> <li>Learning styles often determine the selection and use of LLS. For example, analytic style learners prefer LLS such as contrastive analysis, rule-learning, and dissecting words and phrases. Globally-oriented learners use LLS to find the big picture (guessing, scanning, predicting). Visual learners use visually-based LLS like note-taking and writing words in groups, while auditory learners like to work with tapes and practice aloud. Learners are sometimes able to stretch beyond their learning style boundaries to use new LLS unrelated to their style (Ehrman &amp; Oxford, 1989).</li> </ul>	<ul style="list-style-type: none"> <li>Relatively sophisticated adult language learners</li> </ul>
<b>Psychological Type</b>	<ul style="list-style-type: none"> <li>Psychological type affects the selection and use of LLS (MBTI and SILL). Certain conclusions may be drawn concerning psychological types. Introverts tend to use LLS that involve internal manipulation of concepts. Extraverts tend to employ authentic language use LLS outside of the classroom. Sensing types like sequentially organized lessons. Intuitive types like to control their own learning and they use LLS that “put pieces together.” Thinkers prefer independent learning and techniques that do not require building relationships with people. They also like structured learning programs. Feelers are affected by the relationship with those involved in the learning process, such as the teacher and classmates. Judgers prefer a program with a clear structure, whether sequential or not. Perceivers can handle less structured approaches and they like open-ended communicative and discovery activities (Ehrman &amp; Oxford, 1989).</li> </ul>	<ul style="list-style-type: none"> <li>Relatively sophisticated adult language learners</li> </ul>
<b>School Major</b>	<ul style="list-style-type: none"> <li>Humanities, social science, and education majors used two categories of LLS significantly more than students in technical, business, or other fields: independent LLS and functional practice/authentic language use LLS (Oxford &amp; Nyikos, 1989). It should be noted that school major is usually categorized under “career orientation.” I suggest that they should go under different headings, because students who major in, say, philosophy, can end</li> </ul>	<ul style="list-style-type: none"> <li>Relatively inexperienced language learners</li> </ul>

up as lawyers, teachers, artificial intelligence researchers, etc.		
<b>Stage of L2 Proficiency</b>	<ul style="list-style-type: none"> <li>• In general, the more advanced the language learner, the more task-appropriate the LLS used (Oxford, 1990b).</li> <li>• As students progress to the next higher grade or class level, they do not necessarily display improved LLS use (Cohen &amp; Apeh, 1981).</li> <li>• More advanced learners tend to use more sophisticated LLS: <ul style="list-style-type: none"> <li>• Bialystok, 1981</li> <li>• Politzer, 1983</li> </ul> </li> <li>• Lower level students depended much more on their teacher and focused more on the linguistic code than did higher level students (Tyacke and Mendelsohn, 1986 as cited in Oxford, 1990b).</li> <li>• University students showed developmental trends in LLS use, with decreasing and increasing use of various LLS as the semesters progressed (Nyikos, 1987).</li> <li>• Formal practice with rules and forms became less and less effective as students of French advance, but functional practice with authentic, communicative language displayed no such limitation (Bialystok, 1981).</li> <li>• Foreign language students who have studied the L2 for a minimum of four or five years used communication-oriented LLS (i.e., functional practice LLS and conversational input elicitation LLS) significantly more than did less experienced students (Oxford &amp; Nyikos, 1989).</li> </ul>	<ul style="list-style-type: none"> <li>• A range of learner levels (in a review of multiple studies)</li> <li>• Advanced, intermediate, and beginning learners</li> <li>• High school French students who had been studying for four to six years</li> <li>• Advanced, intermediate, and beginning learners</li> <li>• Higher and lower level students</li> <li>• Beginning learners</li> <li>• High school French students who had been studying for four to six years</li> <li>• Relatively inexperienced language learners</li> </ul>

	<ul style="list-style-type: none"> <li>• In a study of six factors that affect LLS selection and use by Japanese learners, proficiency was not found to affect LLS choices significantly (Tamada, 1999).</li> <li>• Note: Older learners may use more sophisticated LLS. In school studies, it can be difficult to determine whether age or proficiency level accounts for the more sophisticated LLS use.</li> </ul>	<ul style="list-style-type: none"> <li>• University students and recent graduate with at least six years of EFL study but limited English communicative competence</li> </ul>
<b>Studying and Living Abroad</b>	<ul style="list-style-type: none"> <li>• It was found that the experience of studying and living abroad during a summer intensive English program altered LLS choice, especially for male students (Tamada, 1996).</li> </ul>	<ul style="list-style-type: none"> <li>• University students and recent graduate with years of EFL study but limited English communicative competence</li> </ul>
<b>Type of Language Task</b>	<ul style="list-style-type: none"> <li>• The nature of the task influences the selection and use of LLS:             <ul style="list-style-type: none"> <li>• Bialystok, 1981</li> <li>• O'Malley &amp; Chamot, 1990</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• High school French students who had been studying for four to six years</li> <li>• Advanced, intermediate, and beginning secondary school ESL learners</li> </ul>

**Table 6.1****Conceptions of the Purpose of LLS Research****The Present Conception of the Purpose of LLS Research**

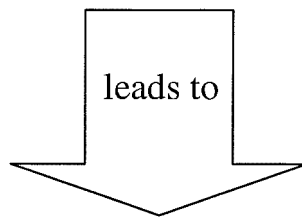
Research on LLS



the application of findings  
to benefit less successful language learners

**The Proposed Conception of the Purpose of LLS Research**

Research on LLS



the application of findings  
to benefit all language learners  
(more successful and less successful language learners)





Table 6.2

**Findings of LLS Interventionist Studies**

<b><i>Categories of Findings of LLS Interventionist Studies</i></b>	<b><u>Representative studies</u></b>	<b><i>Proficiency of Learners</i></b>
<b>LLS instruction that had a positive effect on some areas of language learning, but not on all areas</b>	<ul style="list-style-type: none"> <li>• Carrell, Pharois, &amp; Liberto, 1989</li> <li>• Cohen &amp; Apek, 1980</li> <li>• O'Malley, Chamot, Stewner-Manzanares, Russo, &amp; Kupper, 1985b</li> </ul>	<ul style="list-style-type: none"> <li>• Learners with TOEFL scores in the range of 470-524 or learners who simply advanced from the Level 3 to the Level 4 course</li> <li>• Advanced, intermediate, and beginning learners</li> <li>• Intermediate learners</li> </ul>
<b>LLS instruction that had no effect on language outcomes</b>	<ul style="list-style-type: none"> <li>• Thompson &amp; Rubin, 1996</li> </ul>	<ul style="list-style-type: none"> <li>• Low intermediate/high beginning learners</li> </ul>
<b>LLS instruction that is less effective than no LLS instruction</b>	<ul style="list-style-type: none"> <li>• O'Malley, 1987</li> </ul>	<ul style="list-style-type: none"> <li>• Intermediate learners</li> </ul>